CENTENNIAL

at TEJON RANCH

Centennial Project

Consolidated Final Environmental Impact Report

Volume 3

State Clearinghouse No. 2004031072
Specific Plan No. 02-232
County Project No. 02-232
General Plan Amendment No. 02-232
Zone Change No. 02-232
Vesting Tentative Parcel Map No. 060022
Conditional Use Permit No. 02-232
Development Agreement No. RPPL2016003940

Lead Agency: County of Los Angeles
Department of Regional Planning
Hall of Records, 13th Floor, Room 1348
320 West Temple Street
Los Angeles, California 90012

November 2018

Consolidated
Final Environmental Impact Report

Centennial Project

Los Angeles County, California

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3.0 RESPONSES TO CORRESPONDENCE RECEIVED AND PUBLIC TESTIMONY GIVEN AFTER CLOSE OF OFFICIAL DRAFT EIR PUBLIC COMMENT PERIOD

3.1 RESPONSES TO CORRESPONDENCE RECEIVED PRIOR TO JUNE 6, 2018 REGIONAL PLANNING COMMISSION HEARING

All comment letters received by the County between May 21, 2018 and June 12, 2018, as well as letters presented to the County at the June 6, 2018 Regional Planning Commission hearing, have been included and responded to herein. Comments that raise environmental issues pertinent to the analysis presented in the EIR have been thoroughly addressed in these responses.

With respect to the new comments letters received, individual comments within the body of each letter have been identified and numbered. Brackets delineating the individual comments and a numeric identifier have been added to the right margin of the letter. Responses to each bracketed comment are included on the page(s) following each comment letter, and the electronic PDF file includes hyperlinks between the comment and the associated response to facilitate ease of review.

Table 1 below presents a summary listing of all additional comment letters received, including the commenting agency/individual; the assigned numbering for each comment letter; the date of the correspondence; and the page number where the comment letter can be found herein.

TABLE 3.1-1
ADDITIONAL LIST OF COMMENTERS

Comment Letter Category		Date of Correspondence	Follows Page Number
Letter No.	**Commenter**		
A. Federal Agencies			
-	-	-	-
B. State Agencies			
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C. County Agencies			
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-	-	-	-
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ADD-F.5	Southern California Leadership Council	June 5, 2018	3-48
ADD-F.6	Advocates for the Environment	June 5, 2018	3-50
G. Individuals			
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ADD-G.2	Judith Fuentes	June 5, 2018	3-54
ADD-G.3	Form Letter 3 – Various Commenters	Various Dates	3-56
ADD-G.4	Form Letter 4 – Various Commenters	Various Dates	3-58
ADD-G.5	Sidney Stone	May 24, 2018	3-60
ADD-G.6	Christie Brown	May 24, 2018	3-62
ADD-G.7	Mihai Craioveanu	May 24, 2018	3-64
ADD-G.8	James Tresevant	May 24, 2018	3-66
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ADD-G.11	Susan Sundberg	May 30, 2018	3-72
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ADD-G.28	Dawn Crumley	June 4, 2018	3-106
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ADD-G.39	Margaret Rhyne	June 4, 2018	3-128
ADD-G.40	Jessica T	June 4, 2018	3-130
ADD-G.41	George Nanoski	June 5, 2018	3-132
ADD-G.42	Susan Zahnter	June 5, 2018	3-134

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B. State Agencies

CENTENNIAL

at TEJON RANCH

STATE OF CALIFORNIA – CALIFORNIA NATURAL RESOURCES AGENCY
EDMUND G. BROWN JR., Governor

DEPARTMENT OF WATER RESOURCES
1416 NINTH STREET, P.O. BOX 942836
SACRAMENTO, CA 94236-0001
(916) 653-5791

June 5, 2018

County of Los Angeles
Department of Regional Planning
Attn: Jodie Sackett
320 West Temple Street
Los Angeles, CA 90012

Mr. Sackett:

Notice of Public Hearing for the Specific Plan, Final Environmental Impact Report (EIR) for SCH2004031072, General Plan Amendment, Zone Change, Vesting Tentative Parcel Map, Conditional Use Permit and Development Agreement for the Centennial development in Los Angeles County

We received the above notice for the June 6, 2018 public hearing and have reviewed the final EIR and supporting documents located on the Department of Regional Planning website for the project. Thank you for including the Department of Water Resources' (DWR) previous comments and the responses to those comments in the body of the Final EIR (FEIR). We have enclosed copies of our prior responses, dated October 30, 2015 and July 10, 2017.

Because our comments were not included in the Draft EIR, this is the first time that the DWR has been able to review the responses to the concerns raised in our original comment letters. Upon review of the FEIR responses, DWR has additional concerns about the Centennial project. We request that the following comment be entered in the FEIR record and encourage the developer to acknowledge DWR's concerns.

ADD-B.1-1

Stormwater and Nuisance Water Discharged On Department Right-of-Way:

Our initial comments about potential contamination of waters within the State Water Project (SWP) were based on initial impressions that drainage from the western portion of the Centennial project had the potential to impact the open channel waters of Gorman Creek watershed and the West Branch of the SWP. Further review of the topography confirmed that a majority of the run-off from the project would flow to the east and across the East Branch of the SWP. The FEIR responses adequately addressed DWR concerns about impacts to the West Branch of the SWP, however the text of the responses raises new concerns about stormwater/contaminant issues that could impact the East Branch of the SWP. There are several instances (first occurring on Page 2-64 of the FEIR) where the following statement was used in responding to DWR concerns about the discharging of stormwater, nuisance water, or contaminants into or across DWR right-of-way:

ADD-B.1-2

ADD-B.1-3

"The California Aqueduct contains a levee system that protects its waters from stormwater flooding or other surface flows and the aqueduct channel is constructed with cement and other impervious materials. Consequently, Project development area runoff will not directly flow into or indirectly affect (e.g. by groundwater infiltration) water quality in the California Aqueduct."

Our concern is that the above statement incorrectly characterizes the function and capabilities of the SWP Aqueduct embankments. DWR's earth-filled Aqueduct embankments were primarily designed for water retention and not specifically to manage external water flows or ponding against the embankments.

Some of our principal concerns, based on experience with subdivision development neighboring the Aqueduct, are peak stormwater run-off and stormwater discharges into DWR right-of-way. DWR also has concerns about year-round residential run-off that has the potential to create a perennially wet condition in the cross-drainage features that cross the Aqueduct and DWR right-of-way. Runoff from the project shall not damage DWR right-of-way or interfere with the safe operation of the State Water Project (SWP). Therefore, all runoff from the proposed project shall be managed outside of DWR right-of-way and discharged to DWR right-of-way perpendicular and in-line with existing cross-drainage structures at or below the existing capacity of these structures

ADD-B.1-3 cont.

Please provide DWR with a copy of any subsequent environmental documentation when it becomes available. Any future correspondence relating to this project shall be directed to:

Leroy Ellinghouse, Chief
SWP Right-of-Way Management Section
Division of Operations & Maintenance
Department of Water Resources
1416 Ninth Street, Room 641-1
Sacramento, CA 95814

If you have any questions, please contact Scott Williams at (916) 653-5746 or Leroy Ellinghouse of my staff at (916) 653-7168.

ADD-B.1-4

Sincerely,

Dale R

Dale Brown, Chief
Project Management Office
Division of Operations and Maintenance

Enclosure

cc: Tejon Ranch Company
4436 Lebec Road
Tejon Ranch, CA 93243

STATE OF CALIFORNIA – CALIFORNIA NATURAL RESOURCES AGENCY
EDMUND G. BROWN JR., Governor

DEPARTMENT OF WATER RESOURCES
1416 NINTH STREET, P.O. BOX 942836
SACRAMENTO, CA 94236-0001
(916) 653-5791

July 10, 2017

County of Los Angeles
Department of Regional Planning
Attn: Samuel Dea
320 West Temple Street
Los Angeles, California 90012

Draft Environmental Impact Report for the Proposed Centennial Project, Community of Gorman, Los Angeles County, Southern Field Division, West Branch of California Aqueduct Milepost 4.0, SCH2004031072

Dear Mr. Dea:

Thank you for the opportunity to review and comment on the Draft Environmental Impact Report (DEIR) for the Proposed Centennial Project within the County of Los Angeles. The document describes a proposal by the Tejon Ranch Company to develop 19,333 residential units, in addition to business parks, commercial use spaces and institutional/civic structures and spaces within approximately 12,323 acres east of Interstate Route 5. The project is located approximately 25 miles north of the Community of Castaic. The Department of Water Resources' (DWR) West Branch California Aqueduct (Aqueduct), a part of the State Water Project (SWP), is located within the project boundaries on the north side of Hwy 138.

DWR responded with comments to the 2015 Notice of Preparation (NOP) for this project in an October 30, 2015 letter to your office. Our letter does not appear within the State Agency comments appendix of the DEIR. We have enclosed a copy of our original comment letter and we reiterate the concerns addressed in the letter. Tejon Ranch Company will be required to comply with any and all provisions of Water Code Section 12899-12899.11 or California Code of Regulations, Title 23, Section 630-635 regarding encroachments within, or affecting, the SWP right-of-way.

In addition to our earlier comments on the NOP, which need to be addressed in the DEIR, DWR has amended wildlife comments after reviewing the DEIR. This includes, but is not limited to, analysis and implementation of a buffer of natural habitat between the development and DWR right-of-way wide enough to prevent impacts to DWR maintenance and repair work during nesting bird season; and the addition of wildlife overpasses that begin and end outside DWR right-of-way.

Buffers should take into consideration standard requirements by California Department of Fish and Wildlife for nesting raptors. Overpasses dedicated to wildlife movement will reduce the risk to DWR personnel from vehicle collision with large mammals, reduce the risk of accidents trying to avoid hitting wildlife, reduce the risk of animals hit by vehicles on bridges from falling into the Aqueduct, and prevent an increase in wildlife being trapped in the Aqueduct while trying to access open space.

ADD-B.1-5

As indicated in our previous letter, portions of this project may require the issuance of an encroachment permit from DWR.

Please provide DWR with a copy of any subsequent environmental documentation when it becomes available for public review. Any future correspondence relating to this proposed project shall be directed to:

Leroy Ellinghouse, Chief
SWP Right-of-Way Management Section
Division of Operations and Maintenance
Department of Water Resources
1416 Ninth Street, Room 641-1
Sacramento, CA 95814

ADD-B.1-5 cont.

If you have any questions, please contact Scott Williams at (916) 653-5746, or Leroy Ellinghouse of my staff at (916) 653-7168.

Sincerely,

for David M. Samson, Chief
State Water Project Operations Support Office
Division of Operations and Maintenance

Enclosure

cc: Tejon Ranch Company
4436 Lebec Road
Tejon Ranch, California 93243

bcc: Sheree Edwards, 631-7
Leroy Ellinghouse, 641-1
Gabino Velazquez, SFD
Joseph Cruz, SFD
Megan Evans, SFD
Nadell Gayou, 901 P Street
Alejandra Lopez, 425
Scott Goebl, HLPCO, JOC

October 30, 2015

Samuel Dea
Special Projects Section
Department of Regional Planning
County of Los Angeles
320 West Temple Street
Los Angeles, California 90012

Revised Notice of Preparation, Centennial Project, East of the Community of Gorman, North of Quail Lake, Los Angeles County, Southern Field Division, SCH2004031072

Dear Mr. Dea:

Thank you for the opportunity to review and comment on the Revised Notice of Preparation (NOP) of the Centennial Project (Project) located in an unincorporated area north of Quail Lake and south of Tehachapi Afterbay in Los Angeles County. The Project includes development of 12,323-acre master planned community with residential, business park, commercial, civic and institutional, and recreation and entertainment uses within the privately-owned Tejon Ranch. Community infrastructure facilities that will serve the Project include construction of wastewater reclamation facilities, water treatment facility, water bank, and materials recovery facility. A new bridge crossing over the West Branch of the California Aqueduct (Aqueduct) is also proposed in the Project.

The Notice of Preparation of the Project was originally submitted in 2004 and is revised to include reduction in development area and no development in the northwest area of the Project site.

ADD-B.1-6

California Department of Water Resources (DWR) has concerns about the Project at the following areas:

Biological Resources

DWR personnel conduct routine maintenance and repairs adjacent to the Project. DWR requests impacts to wildlife that cause migration into DWR right-of-way be analyzed as nesting birds and special-status species relocating into DWR right-of-way will impact our ability to maintain and improve State Water Project (SWP) facilities. Nesting birds, including ground nesting raptors, and special status species moving into DWR right-of-way due to loss of habitat would likely require DWR having to consult with wildlife control agencies in order to perform the routine maintenance and repair. Movement of

wildlife into DWR right of way has the potential to stop work until take permits are secured, whereas prior to development no take permits were required.

Antelope, deer, and badgers are often seen in the area of the Project. Movement of wildlife species into the DWR right-of-way could result in increased accidents with large mammals and road kill. The environmental impact report (EIR) shall address wildlife movement caused by the Project. Page 6 of the NOP states that the Aqueduct is a barrier to wildlife movement; however, many species have been observed finding ways to cross the Aqueduct and an increased number of bridges along the Aqueduct could promote crossings by wildlife.

Hydrology and Water Quality

Two golf courses are planned for each side of the Aqueduct. Golf courses traditionally use fertilizers and pesticides for maintenance. Fertilizers and pesticides could have a major impact on water quality to the California Aqueduct. Impacts to water quality caused by maintenance of the golf courses and project drainage need to be addressed in the EIR. In addition, the Project will increase use of fertilizers and pesticides used by residents. Fertilizers and pesticides could have a major impact on water quality to the California Aqueduct. Impacts to water quality caused by residential use need to be addressed as well.

ADD-B.1-6 cont.

The Project also has the potential to increase the risk of household chemicals and hydrocarbons entering the Aqueduct. Improper disposal of motor oil and household chemicals is a recognized problem in many California communities and may have a significant impact to the Aqueduct as a result of the Project. Impacts to water quality of the Aqueduct shall be addressed.

New bridge development and improvements to existing bridges over the Aqueduct have the potential to impact water quality during construction. Impacts to water quality due to construction shall be addressed.

Drainages need to be designed to avoid the California Aqueduct, and must be specifically discussed in the EIR.

The Project would be located adjacent to the California Aqueduct and Quail Lake. In addition, the western portion of the Project site is located within the watershed of Gorman Creek, which drains to Pyramid Lake. The EIR should evaluate whether the Project would cause erosion and introduce sediment into the Aqueduct or Quail Lake, and whether the Project would cause other pollutants to flow into these waters or

Gorman Creek. Introduction of sediment into the SWP system could reduce the capacity of the SWP water storage and conveyance facilities, damage SWP mechanisms, and/or require DWR to perform additional, unnecessary, and potentially costly maintenance on the SWP facilities. Also, introduction of sediment and other pollutants into the SWP system could impair the quality of the water transported by the SWP.

Geology and Soils

Ground subsidence due to overdraft of ground water is a problem that impacts canals throughout California. Ground subsidence near the Project could cause impacts to the Aqueduct that may result in the need to increase maintenance or call for major repairs. Groundwater use and overdraft prevention shall be addressed in the EIR document.

Some portions of the Project would be built in close proximity to SWP facilities. The EIR should evaluate whether the Project would affect the geology and/or soils in the vicinity of the SWP facilities in a manner that would impair the geological stability of the SWP or the quality of the water flowing through the SWP.

Hazards

The Project would be located near several SWP facilities, most of which are closed to the public for safety and infrastructure security reasons. The Project would substantially increase the number of people living, working, shopping, recreating, and otherwise visiting the Project area. The EIR should evaluate whether the Project would substantially increase the potential for public safety hazards (e.g., drowning), vandalism, or infrastructure security concerns attributable to the proposed population increase near the SWP. The Project should be designed to discourage and prevent unauthorized access to SWP facilities.

The EIR should also evaluate the potential for the Project to introduce hazardous materials (e.g., construction fuels and chemicals) onto SWP land and into the water carried by the system.

Land Use

The Project would be located adjacent to the California Aqueduct and Quail Lake. The Project should be designed to avoid unauthorized encroachment onto SWP facilities and to not interfere with DWR's ability to access and maintain the SWP. If the Project encroaches onto land owned or managed by DWR (e.g., the proposed access road, bridges, and water pipeline), the Project sponsor should coordinate with DWR during

ADD-B.1-6 cont.

the early stages of the planning process about securing authorization for the encroachment(s).

Any construction activity in the vicinity of the California Aqueduct may require an encroachment permit issued by DWR. Information regarding regulations and forms for submitting an application for an encroachment permit to DWR can be found at:

http://www.water.ca.gov/engineering/Services/Real_Estate/Encroach_Rel/

Please provide DWR with a copy of any subsequent environmental documentation when it becomes available for public review. Any future correspondence relating to this proposed project shall be sent to:

ADD-B.1-6 cont.

Leroy Ellinghouse, Chief
SWP Encroachments Section
Division of Operations and Maintenance
Department of Water Resources
1416 Ninth Street, Room 641-2
Sacramento, California 95814

If you have any questions, please contact Leroy Ellinghouse, Chief of the SWP Encroachments Section, at (916) 653-7168 or Jonathan Canuela at (916) 653-5095.

Sincerely,

David M. Samson, Chief
State Water Project Operations Support Office
Division of Operations and Maintenance

cc: State Clearinghouse
Office of Planning and Research
1400 Tenth Street, Room 121
Sacramento, California 95814

bcc: Sheree Edwards, 641-1
Anthony Chu, 620
David Panec, 604
Earl Nelson, HLPCO, 2033 Howe Avenue, Room 220, Sacramento
Megan Evans, Southern FD
John Bunce, Southern FD
Jaime De Santiago, Southern FD
Nadell Gayou, 901 P Street

Response to Comment Letter ADD-B.1
Department of Water Resources
June 5, 2018

Response to Comment ADD-B.1-1:

Thank you for your continued participation in this public process. As this comment accurately notes, the Final EIR includes responses to all of the comments raised in Commenter's letters dated October 20, 2015 and July 10, 2017 (see Final EIR, Section 2.0, responses to Comments B.2-1 through B.2-20). Per the Commenter's request, their letter dated June 5, 2018 is included in the Project administrative record. Regarding the Commenter's additional concerns, please also see responses to Comments ADD-B.1-2 through ADD-B.1-6.

Response to Comment ADD-B.1-2:

The Commenter's acknowledgement that the Final EIR adequately addresses the Commenter's prior comments regarding impacts to the West Branch of the State Water Project is noted with appreciated and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration.

Response to Comment ADD-B.1-3:

The quoted sentence from Final EIR page 2-64 is not intended to be read in isolation, without regard for the required implementation of Project mitigation measures and is not intended to suggest that the Project is relying on existing levee construction techniques to protect the California Aqueduct from Project development area runoff. All runoff from the proposed Project will be managed on-site, outside of DWR right-of way, and discharged to DWR right-of-way perpendicular and in-line with existing cross-drainage structures at or below the existing capacity of these structures. As stated in Draft EIR Section 5.2.6 (page 5.2-43), "[p]otential impacts related to the creation or contribution of runoff water that exceeds the capacity of existing or planned storm water drainage systems will be less than significant with implementation of MM 2-1, MM 2-2, and MM 4-1." Indeed, MM 2-2 expressly requires that "BMPs must be implemented to ensure that, for the capital storm event, there is no increase in peak discharge rates and no increase in runoff volume offsite compared with peak discharge rates and runoff volumes under existing, pre-development, conditions." This less-than-significant impact determination is supported by Section 5.5 of Draft EIR Appendix 5.2-A, *Centennial Master Plan Hydrology* (page 32), which determined that "[t]he Project will not increase off-site peak flow rate and flow volume for the LID, 2-, 5-, 10-, 25-, and 50-year runoff events and will not alter the off-site morphology of these channels. This result demonstrates no negative impact to off-site property based on an event-based analysis."

Regarding DWR's concerns about year-round residential runoff that has the potential to create a perennially wet condition in the cross-drainage features that cross the Aqueduct and DWR right-of-way, dry weather flows will be infiltrated within the project via onsite BMPs required by MM 2-1. As stated in Draft EIR Section 5.4.6 (page 5.4-88), "[t]he proposed

regional and distributed LID BMPs would infiltrate and provide treatment for dry weather flows and small storm events." Additionally, the on-site BMPs will be designed to drain in an amount of time to avoid perennially wet conditions. As stated in EIR Section 5.2.6 (page 5.2-48), "[a]ll soft-bottom drainage facilities – including regional and distributed basins and stream channels – would be designed to fully drain or infiltrate captured water in less than four days… ." As explained in the Project MMRP, and in EIR Appendix 4.0-A - *Centennial Specific Plan* (page 3-59), MM 2-1, MM 2-2, and MM 4-1 will be monitored and enforced by the Los Angeles County Department of Public Works as part of the tentative subdivision map approval process.

Based on the above response and information in the EIR, the proposed Project would not have significant direct or indirect hydrology or water quality impacts associated with DWR or SWP facilities or rights-of-way.

Response to Comment ADD-B.1-4:

The Commenter's contact information described in this comment, and its request for any subsequent environmental documents related to the Project is noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration.

Response to Comment ADD-B.1-5:

Please see responses to Comments B.2-1 through B.2-6 (Final EIR page 2-59) which address all of the comments raised in this Comment ADD-B.1-5.

Response to Comment ADD-B.1-6:

Please see responses to Comments B.2-7 through B.2-10 (Final EIR pages 2-60 through 2-72) which address all of the comments raised in this Comment ADD-B.1-6.

C. County Agencies

CENTENNIAL

at TEJON RANCH

COUNTY OF LOS ANGELES
FIRE DEPARTMENT

1320 NORTH EASTERN AVENUE
LOS ANGELES, CALIFORNIA 90063-3294
(323) 881-2401
www.fire.lacounty.gov

"Proud Protectors of Life, Property, and the Environment"

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FIRE CHIEF
FORESTER & FIRE WARDEN

BOARD OF SUPERVISORS

HILDA L. SOLIS
FIRST DISTRICT

MARK RIDLEY-THOMAS
SECOND DISTRICT

SHEILA KUEHL
THIRD DISTRICT

JANICE HAHN
FOURTH DISTRICT

KATHRYN BARGER
FIFTH DISTRICT

June 12, 2018

Jodie Sackett, Analyst
Department of Regional Planning
Planning Department
320 West Temple Street
Los Angeles, CA 90012

Dear Mr. Sackett:

FINAL ENVIRONMENTAL IMPACT REPORT, "CENTENNIAL PROJECT," INVOLVES THE DEVELOPMENT OF A NEW COMMUNITY WITH RESIDENTIAL, COMMERCIAL, BUSINESS PARK, RECREATIONAL/ENTERTAINMENT, AND INSTITUTIONAL/CIVIC USES, CITYWIDE, ANTELOPE VALLEY, FFER 201800059

The Final Environmental Impact Report has been reviewed by the Planning Division, Land Development Unit, Forestry Division, and Health Hazardous Materials Division of the County of Los Angeles Fire Department.

The following are their comments:

PLANNING DIVISION:

We have no further comments.

LAND DEVELOPMENT UNIT:

The Land Development Unit has no additional comments to the June 6, 2017 "Fire Department comment letter." For any questions regarding the report, please contact FPEA Wally Collins at (323) 890-4243 or Wally.Collins@fire.lacounty.gov.

ADD-C.1-1

FORESTRY DIVISION – OTHER ENVIRONMENTAL CONCERNS:

The statutory responsibilities of the County of Los Angeles Fire Department's Forestry Division include erosion control, watershed management, rare and endangered species, vegetation, fuel modification for Very High Fire Hazard Severity Zones or Fire Zone 4, archeological and cultural resources, and the County Oak Tree Ordinance.

The areas germane to the statutory responsibilities of the County of Los Angeles Fire Department's Forestry Division have been addressed.

The County of Los Angeles Fire Department's Forestry Division has no further comments regarding this project.

ADD-C.1-1 cont.

HEALTH HAZARDOUS MATERIALS DIVISION:

The Health Hazardous Materials Division (HHMD) of the Los Angeles County Fire Department previously provided comments regarding the project draft environmental impact report (EIR) in June 2017. HHMD has no additional comments or requirements pertaining to the final project EIR at this time.

If you have any additional questions, please contact this office at (323) 890-4330.

Very truly yours,

MICHAEL Y. TAKESHITA, ACTING CHIEF, FORESTRY DIVISION
PREVENTION SERVICES BUREAU

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DEPT OF REGIONAL PLANNING

Response to Comment Letter ADD-C.1
County of Los Angeles Fire Department
June 12, 2018

Response to Comment ADD-C.1-1:

Thank you for your comment and for your continued participation in this public process. This comment confirms that the County of Los Angeles Fire Department's Planning Division, Land Development Unit, Forestry Division, and Health Hazardous Materials Division have all reviewed the Centennial Project Final EIR and have no additional comments. This comment does not raise any specific concerns regarding the adequacy of the EIR and thus no further response is required.

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E. Local Agencies

CENTENNIAL

at TEJON RANCH

ADD-E.1

Steve Sonder, President
Patricia Edwards, Clerk
Julie Ralphs, Member

Gorman Joint School District
49847 Gorman School Road
P.O. Box 104
Gorman, CA 93243
(661) 248-6441 – FAX (661) 248-0604

Johannis L. Andrews II
Superintendent/Principal

May 29, 2018

Mr. Jodie Sackett
Los Angeles County Department of Regional Planning
320 West Temple Street
Los Angeles, CA 90012

RE: CENTENNIAL AT TEJON RANCH - SUPPORT

Dear Mr. Sacket:

I am sorry that I will not be able to attend the June 6, 2018 Regional Planning Commission Hearing. As the Superintendent of the Gorman Joint School District, I'm writing in support of Centennial at Tejon Ranch. The County of Los Angeles is facing a housing crisis and we need a variety of housing types in various locations throughout Los Angeles County. Centennial's master-plan will do just that; create more price-attainable housing and it will help accommodate the planned regional population and economic growth in our county.

As you know, Centennial is consistent with the Antelope Valley Area Plan (AVAP), offering a wide array of housing, business park/office space, commercial, schools, parks, natural open space, cultural, and public uses. The community masterplan is simply, the implementation of the AVAP, a balanced plan of economic opportunity and conservation. Centennial has also been at the table with the Golden State Gateway Coalition in regards to fast tracking the I-5 improvements before this new community has been set.

It is important to define the project location in terms of synergy with the growing populations near the Centennial project. There is great synergy between other Tejon Ranch projects in Kern County, including Grapevine and Tejon Mountain Village, as well as the Antelope Valley and Santa Clarita.

ADD-E.1-1

Centennial is LA County's opportunity to take advantage of growth at Tejon Ranch in Kern County by increasing tax revenue for the general fund and providing increased public services to North LA County, but also providing diverse working-class and middle-income families an opportunity for homeownership.

In addition, Centennial includes plans to focus on water conservation through the use of recycled water and several other sustainable sources. The project's Green Development program requires reduced potable water consumption through the use of drought-tolerant plants, low-flow showerheads, faucets, and toilets. The Centennial master plan will also use recycled water for landscape irrigation in residential common areas.

I urge the Regional Planning Commission to approve and allow Centennial to move forward. We need to finally begin development on this much-needed community.

Sincerely,

Johannis L. Andrews II
Gorman Joint School District
Superintendent/Principal

Response to Comment Letter ADD-E.1
Gorman Joint School District
May 29, 2018

Response to Comment ADD-E.1-1:

Thank you for your comment and for your participation in this public process. According to the Commenter, the Gorman Joint School District, the Project implements the AVAP with a balanced plan of economic opportunity and conservation while providing needed housing in North Los Angeles County. This comment's stated support for the Project is noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration.

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F. Organizations

CENTENNIAL

at TEJON RANCH

ADD-F.1

CASTAIC AREA TOWN COUNCIL
Mailing Address: P.O. Box 325 – 20281 Franklin Parkway, Santa Clarita, CA 91383
Contact: castaictowncouncil@gmail.com - castaictowncouncil.org

Mr. Jodie Sackett
County of Los Angeles
Department of Regional Planning
Hall of Records, 13th Floor, Room 1340
320 West Temple Street
Los Angeles, California 90012

Dear Mr. Sackett,

The Castaic Town Council has received the Revised Notice of Public Hearing for the "Centennial Specific Plan Project" (4/18/18). Although the project is located a number of miles north from Castaic town center, the community will be impacted from the potential traffic coming from this development.

The current sound levels from Interstate 5 southbound cars and trucks is pretty significant. For the last mile the grade is at 5% with cars and trucks applying their brakes. Many houses located on the west side of the freeway shake during compression brake application.

ADD-F.1-1

With added traffic in this particular area bounding off the Double C Ranch and Hidden Lake developments, we would like to request a study to see if a sound wall is viable and appropriate. The requested area would be South Interstate 5, starting one mile before the Lake Hughes off-ramp.

ADD-F.1-2

Thanks for your consideration.

Jessica Rousel Chambers
President, Castaic Area Town Council

Response to Comment Letter ADD-F.1
Castaic Area Town Council
May 21, 2018

Response to Comment ADD-F.1-1:

Thank you for your comment and for your participation in this public process. As shown in Final EIR Appendix 5.10-C, Tables 4-1 and 5-1, under both the "Existing Public Project" and "Long Range Cumulative with Project" scenarios, with mitigation, traffic levels of service (LOS) along Interstate 5 between Templin Highway and Lake Hughes Road in the vicinity of Castaic would not exceed the applicable LOS threshold of significance. This comment's observations regarding existing sound levels along Interstate 5 in the vicinity of Castaic are noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration. However, as shown in Final EIR Appendix 5.12-C, Table 3, under the cumulative "With Project" scenario there would not be a significant noise impact associated with Project-generated traffic at sensitive noise receptors located adjacent to Interstate 5 between Templin Highway and Lake Hughes Road, which is the location of receptors of concern to the Commenter.

Response to Comment ADD-F.1-2:

As shown in Final EIR Appendix 5.12-C, Table 3, under the cumulative "With Project" scenario there would not be a significant noise impact associated with Project-generated traffic at sensitive noise receptors located adjacent to Interstate 5 between Templin Highway and Lake Hughes Road, which is the location of receptors of concern to the Commenter. Accordingly, there is no basis for requiring the Project to provide a sound wall along Interstate 5 starting one mile north of, and extending to, the Lake Hughes Road off-ramp.

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CALIFORNIA
NATIVE PLANT SOCIETY

June 5, 2018

Via Electronic Mail and Hand Delivery (with references)

Los Angeles County Regional Planning Commission
c/o Ms. Rosie O. Ruiz
320 West Temple Street, 13th Floor
Los Angeles, California 90012
rruiz@planning.lacounty.gov

Re: Centennial Specific Plan

Dear Commissioners:

These comments are submitted on behalf of the Center for Biological Diversity ("Center") and the California Native Plant Society regarding the proposed Centennial Project ("Project").

Tejon Ranchcorp and its talented team of lawyers and consultants have performed an amazing feat—they have packaged this incredibly harmful city-sized sprawl project as "sustainable" and environmentally-friendly, when in fact it is the exact opposite.

We ask that you look past this packaging and reject Centennial for what it is—a sprawl city in a remote, fire- and earthquake-prone area that will destroy some of California's last remaining native grasslands. This sprawl city—which is an hour drive (with no traffic) from the LA Metro area—will not provide housing for people already living in Los Angeles communities, nor will it provide any benefit to existing communities. Instead, it will redirect scarce County resources for schools, public safety, and social services to a remote corner of the County.

We ask that you remember that you have no duty to satisfy Tejon and its Wall Street shareholders by approving this proposal. **The people of LA County want real solutions to the housing shortage, not far-flung cities that eliminate California's irreplaceable wildlands. Please listen to the thousands of community members that have taken the time to write to the County and voice their objections to this project.**

You should also reject this Project because the Project's Final Environmental Impact Report ("FEIR") does not cure the Draft Environmental Impact Report ("DEIR")'s failure to

ADD-F.2-1

adequately analyze a range of environmental impacts, mitigation measures, and alternatives; and to adequately describe the Project, its impacts, and mitigation. Indeed, the vast majority of the Conservation Groups' comments on the DEIR have not been effectively addressed in the FEIR and responses to comments. Some of the continuing errors are detailed below but most other issues raised in the Conservation Groups' DEIR comments remain outstanding and so those comments are incorporated herein by reference. The Conservation Groups will be submitting additional comments on the FEIR once they have had adequate time to review the thousands of pages of additional documents that were released on May 24, 2018.

The Center is a non-profit, public interest environmental organization dedicated to the protection of native species and their habitats through science, policy, and environmental law. The Center has over one million members and online activists throughout California and the United Sates. The Center has worked for many years to protect imperiled plants and wildlife, open space, air and water quality, and overall quality of life for people in Los Angeles County.

The California Native Plant Society ("CNPS") is a non-profit environmental organization with 10,000 members in 35 Chapters across California and Baja California, Mexico. CNPS' mission is to protect California's native plant heritage and preserve it for future generations through application of science, research, education, and conservation. CNPS works closely with decision-makers, scientists, and local planners to advocate for well-informed policies, regulations, and land management practices.

ADD-F.2-1 cont.

I. The FEIR Does Not Mitigate the Severe Traffic Impacts of the Project on the County's Already-Burdened Freeways.

Centennial is the poster child for 20th century sprawl. Even by the FEIR's own terms, the FEIR states that only 20 percent of commutes need to occur by some form of transit other than single occupancy vehicles ("SOVs"). This means that 80 percent of trips will occur by SOVs, with the nearest metro centers in Santa Clarita and Los Angeles 35 and 65 miles away, respectively. Even this "mitigation" of achieving 20 percent of trips by non-SOVs is not likely achievable; while the FEIR purports to commit to this goal, there are no plans or policies identified in the FEIR to actually achieve this goal except for unspecified "measures." (FEIR at 2-98.) Similarly, there is no consequence if this measure is found to be infeasible in the real world. Nor does there appear to be monitoring to ensure this goal is reached. And how could there be? Will Tejon or developers to which Tejon sells the project entitlements be requiring residents to mandatorily report what manner of transportation they use to leave the project site? Such mandatory reporting would obviously implicate privacy concerns and likely be infeasible. CEQA requires that mitigation measures be "viable solution[s]" that are "effective in remedying" the project's effects. (See *Gray v. County of Madera* (2008) 167 Cal.App.4th 1099, 1116; see also *Sierra Club v. County of San Diego* (2014) 231 Cal.App.4th 1152, 1170 ["Whether a measure is effective requires not just quantification, but also an assessment of the likelihood of implementation."]; CEQA Guidelines, § 15364 [defining "feasible" as "capable of being accomplished in a successful manner within a reasonable period of time," in light of various factors].) Here, Tejon's promises do not begin to meet CEQA's standard.

ADD-F.2-2

In the Conservation Groups' comments on the DEIR, the Conservation Groups highlighted that there is no mechanism to ensure that commercial development and residential development are built concurrently; such concurrent development would be necessary to ensure

ADD-F.2-3

at least some residents have an opportunity to seek jobs onsite and therefore avoid multi-hour commutes to the LA Metro. This concern is shared by Caltrans, which similarly commented:

> If residential development occurs prior to the commercial, business, and employment center, the typical morning and evening commutes could occur, thus establishing a sprawl type of development. To avoid an unsustainable scenario, the County as lead agency should plan the phasing of the development accordingly. Both residential and employment centers should be developed concurrently. (FEIR, Vol. I at PDF 116.)

ADD-F.2-3 cont.

The FEIR attempts to address this issue by claiming that the approval process for tentative tract map ("TTM") applications will ensure that commercial and residential development occur concurrently. (FEIR at 2-73 – 76.) However, it is unclear from the FEIR whether TTM applications would implicate discretionary or ministerial decision by the County, such that CEQA does not necessarily apply. The EIR does state that approval of final subdivision maps will only amount to a ministerial decision by the County. (DEIR at 4-105.) Quite tellingly, the FEIR sharply limits which County actions would be construed as "discretionary" such that CEQA would likely only apply to "major transfers between villages" and "conditional use permits." (FEIR at 3-100.)

ADD-F.2-4

Likewise, section 4.5 of the Specific Plan purports to describe the scope of ministerial and discretionary authority of the County. In that section, the Specific Plan states:

> If an applicant requests a change to the phasing design (order of phasing or configuration of each phase map) of an approved Tentative Map, the Director, in consultation with the subdivision committee, ***shall approve*** such change if the Director determines that the new order or configuration substantially conforms to the approved Tentative Map. (Specific Plan at 4-5.)

While the import of this section is not completely clear, it suggests that the configuration and timing of phase maps would only be ministerial decisions which the County would be required ("shall") to approve. In short, the FEIR and Specific Plan suggest that Tejon or future owners of the entitlements can make significant changes to the project design ***and*** to project phasing without any discretionary decision-making processes of the County, and thus without any public hearings, public participation, or CEQA review. This undermines the FEIR's claims that commercial and residential development will occur in tandem.

ADD-F.2-5

In an attempt to alleviate the enormous amount of traffic generated by this Project, the FEIR claims that an expanded SR-138 "would be required to accommodate the full buildout of the Project under cumulative traffic conditions." (FEIR at 2-106.) The FEIR accordingly promises to add more lanes to Highway 138 as a mitigation measure. (FEIR at 2-84.) But the profound environmental impacts of this "mitigation" are not appropriately analyzed or considered—LA County is already dealing with the legacy of existing freeways and sprawl built with little regard for their effects on wildlife movement. For instance, our local mountain lion population is hanging on by a thread due to poorly planned freeway development, necessitating a $60 million wildlife crossing to help undo the damage. **Should we really be building another freeway on one of the most important habitat linkages in the state in order to accommodate the desire of Tejon and its shareholders to make money?** Expanding Highway 138 into a full-size freeway will categorically have profound effects on wildlife movement, which will become even more important for species survival as climate change alters the region's ecology.

ADD-F.2-6

In addition, while Caltrans recently finalized an EIR/EIS for the SR-138 expansion, there would be little reason to actually build this costly highway expansion project unless Centennial is approved by the County. The EIR/EIS for the Northwest State Route 138 Corridor Improvement Project ("SR 138 EIR") indicates as much, noting in the "development trends" for the project vicinity that the only "planned" development is Centennial and Tejon Mountain Village (which Kern County approved years ago, but has not yet been built). (SR 138 EIR at 31, 47.) The SR-138 expansion is currently on hold and will be "be built in phases as need or as demand require" accordingly to LA Metro.[1] In short, it will likely not be built unless Centennial is approved by the County. **With an extensive backlog in maintenance on existing roads in California, should the County be approving a massive development that will be dependent upon the construction of what will essentially be a new freeway, paid for with scarce taxpayer resources?**

ADD-F.2-7

Likewise, the FEIR abjectly fails to put forward any workable plan to reduce the enormous traffic generated by Centennial. The FEIR's key mitigation proposal is a "Traffic Mitigation Agreement" that Tejon will negotiate with Caltrans without public input or hearings. (FEIR at 2-87.) Tejon engaged in a similar practice with the Grapevine project in northern Kern County, in which it executed a mitigation agreement with Caltrans many months after the EIR was approved by the Kern County Board of Supervisors. While such agreements will provide some (likely significant) funds to Caltrans to build or expand existing freeways, they do nothing to fulfill CEQA's purposes of analyzing the impacts of the Project ***prior*** to project approval. CEQA requires that the impacts of the Project ***and*** of project mitigation measures be analyzed. Promises to pay Caltrans to expand freeways short-circuits the CEQA process by avoiding analysis of the impacts of such additional freeways and road projects on wildlife, air quality, and California's irreplaceable landscapes.

ADD-F.2-8

The FEIR clings to the unrealistic exception that—despite Southern California's car culture—significant numbers of people will work onsite and that a full 65 percent of trips will be "captured" internally. (FEIR at 2-1480.) This position is particularly striking because the County arrived at virtually the opposite conclusion regarding a similar (yet smaller) sprawl project in northern LA County. In particular, the Northlake Specific Plan Project Final Supplemental Environmental Impact Report proposed both residential and industrial uses, but concluded that it was "speculative" to assume ***anyone*** would work onsite:

> Regarding to employment, the Project does include employment opportunities associated with the on-site light industrial, commercial, recreational and institutional uses. ***While it is possible that some of these jobs may be filled by future residents of the Project, it is too speculative to conclude that***. It is noted that the Project Objectives (refer to page 4-3 of the Draft SEIR) identify that jobs would be created and do not identify that these jobs would necessarily be filled by future residents of the Project.[2]

ADD-F.2-9

While Centennial is a larger project, the County never explains how (1) it is speculative to assume that ***anyone*** would work onsite for the smaller Northlake sprawl project while (2) it is

ADD-F.2-10

[1] Los Angeles County Metropolitan Transportation Authority, Northwest 138 Corridor, available at https://www.metro.net/projects/nw138/ (last visited on June 5, 2018).

[2] Los Angeles County Department of Regional Planning, *NorthLake Specific Plan, Final Supplemental Environmental Impact Report* (January 2018), http://planning.lacounty.gov/assets/upl/case/tr073336_seir.pdf.

assured that a full 65 percent of trips will be internal at Centennial. The FEIR even goes a step further and suggests that this 65 percent internal trip capture rate is a "worst case scenario." (FEIR at 2-1480.) Moreover, as discussed above, the FEIR never considers a scenario in which the residential and commercial development do not occur concurrently. ADD-F.2-10 cont.

On a relate note, the EIR claims that no project alternative would generate more VMT and convert more wildlands to development. (FEIR at 2-540.) This statement is not supportable. Clearly less VMT would be generated by leaving the Project area undeveloped as opposed to building a city of 60,000 people. ADD-F.2-11

II. The FEIR Does Not Adequately Analyze and Provide Appropriate Mitigation for the Project's Impacts to Habitat Connectivity for Wildlife Movement.

Multiple state agencies and environmental organizations have identified the DEIR's failure to adequately analyze and mitigate project impacts to habitat connectivity and wildlife movement. The Center, along with CNPS, Center for Food Safety ("CFS"), the Santa Monica Mountains Conservancy ("SMMC"), TriCounty Watchdogs ("TCW"), the Three Points-Liebre Mountain Town Council ("TPLMTC"), the California Department of Fish and Wildlife ("CDFW"), and the Department of Water Resources ("DWR"), have expressed their concerns regarding this matter through public comment, yet the FEIR continues to downplay the Project's impacts to the unique, intact landscape where several bioregions converge, including the San Joaquin Valley, Tehachapi Mountains, Mojave Desert, Transverse Ranges, Coast Ranges, and the Southern California Coastal Plains. It is more than reasonable for agencies and organizations to demand more thorough analyses of the project area's importance for wildlife movement given that it is surrounded by SEA 17 on three sides (to the north, west, and south, DEIR Exhibit 5.7-15) and the June Administrative Draft of the Antelope Valley Regional Conservation Investment Strategy (AV RCIS) identifies the project area as core habitat with important biological value and intactness. ADD-F.2-12

The FEIR argues that the AV RCIS erroneously identifies the project area as having biological and intact habitat value because they do not trust that their comments and requested changes were taken into consideration at the time of the June 2017 Administrative Draft since they (the County) are no longer involved in the AV RCIS Steering Committee (FEIR at 2-788). The FEIR claims that the use of the Environmental Evaluation Modeling System ("EEMS") in the preparation of the AV RCIS to identify areas of high biological value within Antelope Valley is inadequate because they could not assess the methods used to generate the model, and they dismiss the findings that the project area falls within valuable core habitat (FEIR at 2-788-789). ADD-F.2-13

The FEIR asserts that the AV RCIS's designation of the project area is incorrect because there is high quality habitat outside of the AV RCIS's evaluation area (FEIR at 2-789). However, the presence of high quality habitat outside of the project area does not negate the biological value within the project area. Furthermore, if Tejon disagrees with the use of the EEMS in identifying areas of high biological value, then it is unclear why Tejon goes on to laud that its On- and Off-site Mitigation Preserve includes core habitat identified by the AV RCIS (FEIR at 2-789). It seems that Tejon will accept the reported results of the AV RCIS only when it is in its favor to do so. ADD-F.2-14 ADD-F.2-15

The project area constitutes important habitat that connects the Tehachapi Mountains with the San Gabriel Mountains/Angeles National Forest and allows for the movement of ADD-F.2-16

wildlife, like pronghorn, coyotes, mountain lions, and bears, between these regions. The AV RCIS identifies the project area as being an important corridor where wildlife can move between landscapes easily, yet the FEIR provides little to avoid impacts to habitat connectivity. The FEIR asserts that the California Aqueduct is already a substantive barrier to wildlife movement (FEIR at 2-415), minimizing the importance of two locations where the west branch of the aqueduct goes underground and allows for wildlife movement. Yet multiple species with large home ranges are known to use the habitat in the project area. For example, pronghorn from the southern-most herd in California have been observed over the past few years in scattered locations in the project area (FEIR Exhibit B.4-34). The project area is within the pronghorn's historical range, and the nearby population is already struggling and needs to be afforded opportunities to expand its range and mix with other populations. Despite this, the FEIR continues to dismiss the potential impacts of the Project on movement by pronghorn (FEIR page 2-783), suggesting that mitigation to improve connectivity would actually harm the population (FEIR at 2-147). The FEIR also states that individuals found outside of known occurrence areas (i.e., a pronghorn was observed on the Peterson Ranch Habitat Mitigation Bank in July 2017, FEIR comment B.4-37 by CDFW) are outliers that likely do not represent a potential range expansion (FEIR at 2-147-148). These comments are unfounded and further downplay project impacts to wildlife movement.

ADD-F.2-16 cont.

ADD-F.2-17

ADD-F.2-18

In addition, there is evidence that other large mammals requiring large tracts of land for movement, including mountain lions, black bears, and bobcats, use the project area (FEIR at 2-415). The FEIR argues that species like mountain lions and black bears have large home ranges that would preclude them from occurring on site in concentrated numbers, insinuating that because those species would be uncommon, the impact to their movement would be minimal. However, habitat connectivity that allows for movement between areas with quality habitat are especially important for those species that have large home ranges and occur in relatively low density because individuals need more intact space to find food, shelter, and mates. The FEIR provides insufficient analyses of project impacts to wildlife movement and downplays the need for effective mitigation measures to enhance connectivity between the Tehachapi Mountains and the Angeles National Forest. The FEIR argues that the project only fragments natural open space within the project footprint (FEIR 2-735), not acknowledging that the project itself fragments the greater landscape, ultimately impacting wildlife movement. The lack of intact habitat that would allow wildlife to move north and south in the project area and the provision for just one wildlife crossing where State Route 138 and Cement Plant Road intersect is insufficient to sustain wildlife movement in the area.

ADD-F.2-19

III. The FEIR Does Not Adequately Analyze or Mitigate Potential Project Impacts to Wildlife.

The project area is located in an area with rich biodiversity. Although the FEIR acknowledges this, reporting that 19 of 33 potentially occurring special status species were observed utilizing habitat in the project area (DEIR Table 5.7-8), it fails to provide adequate analysis of project impacts to special status species and lacks appropriate mitigation to avoid or minimize impacts. In addition to the Center, CNPS, and CFS, other government agencies and organizations have shared their concern about the inadequate analysis of impacts to important biological resources, including the USFWS, CDFW, SMMC, TCW, and TPLMTC. And while the FEIR accommodates several comments and concerns regarding species known to occur in the

ADD-F.2-20

project area (per CDFW comments), mitigation measures to avoid or minimize impacts to special status species are still inadequate.

ADD-F.2-20 cont.

The FEIR asserts that many special status species are unlikely, and, if present, they are uncommon, based upon survey data collected between 2000 and 2015 (e.g., FEIR page 2-779-780). However, many of the focused surveys were conducted more than 10 years ago (DEIR Table 5.7-2), which makes it difficult to understand what the environmental baseline is for many of the special status species. For example, breeding and non-breeding burrowing owls are known to occur in and near the project area, but focused surveys were only conducted in 2003 and 2006. Is it possible that conditions have changed in the last 12 years? Similarly, focused surveys for least Bell's vireo and southwestern willow flycatchers were last conducted in 2008, and at that time migrants (i.e., non-nesting individuals) were observed on the project site. The most recent focused surveys were conducted in 2005 for western spadefoot toads and 2006 for arroyo toads and red-legged frogs west of the aqueduct and south of SR 138, and it is unclear why the bog/marsh/riparian habitat identified just north of SR 138 was not surveyed (DEIR Exhibit 5.7-1). Population dynamics are just that – dynamic. It would be helpful to have more recent data to better understand how these species are using the habitat in the project area, if species ranges are potentially expanding, and how the Project would impact them.

ADD-F.2-21

ADD-F.2-22

IV. The FEIR Does Not Adequately Analyze Impacts on Native Grasslands, Wildflower Fields, and Rare Plants.

The FEIR has now jettisoned the requirement for a Grassland Management Plan and replaced that requirement simply with compliance with the Ranch Wide Management Plan (RWMP) included in the Final EIR at Appendix 5.7-D. The RWMP refers to the Grazing Management Recommendations in Appendix B to guide the grazing regime for the mitigation/preservation areas, but Appendix B is included only as a cover page with no actual grazing management recommendations provided (FEIR pdf at 244). This is clearly inadequate in order to evaluate the grazing management and how it may impact or conserve the impacted plants and plant communities for two reasons: 1) the obvious lack of providing information in Appendix B of the RWMP on how the grazing is going to be implemented and 2) Appendix B are only recommendations, not binding requirements for managing the grazing in the mitigation/preservation areas. In addition, the existing RWMP does not provide adequate safeguards to protect the native grasslands and wildflower fields because it is focused on grazing management, not resource management. Because the goal of the mitigation/preservation lands are to offset the impacts of the development, the highest priority needs to be for resource conservation, not grazing. Grazing still needs to be evaluated for appropriateness as a management tool, because in the arid Mojave Desert where the project site and mitigation sites are located, grazing has been documented as an impact to habitat of native plants and animals.

ADD-F.2-23

ADD-F.2-24

ADD-F.2-25

The FEIR is now proposing a 2:1 ratio of <u>individual plants</u> preserved:impacted (FEIR at 2-153). This approach may work with the perennial plant species (*Perideridia pringlei*), but is totally inadequate for the remaining special status plant species, which are annual plant species. Annual plant species rely on a single year to germinate, grow, flower and produce seeds. Most of the time they are present only as seeds. Because the Project is in the arid western Mojave desert, many of the annual plants are "bet hedgers" and only germinate and complete their lifecycle in years of optimum environmental conditions (appropriate amount of precipitation, at appropriate times to see the plants through see production with appropriate temperatures for both

ADD-F.2-26

the plants and their pollinators [only one special status annual plant is wind pollinated]). Therefore, the metric that needs to be used to mitigate annual plants is the maximum area of occupancy. Because of the vagaries of rainfall in the arid western Mojave desert, identification of the extent of the occupied habitat is often only identifiable through consistent studies undertaken over a number of years (often a decade), although seedbank studies could also identify the extent of the occupied habitat. Because the County's goal is to maintain the biodiversity of the flora and fauna of Los Angeles County, it needs to initially be able to evaluate the extent of the special status annual plant occupancy on the proposed project site by area and then apply the mitigation ratio to the mitigation area.

ADD-F.2-26 cont.

It is also unclear how the County determined that a 2:1 mitigation ratio is adequate to mitigate impacts to all the special status plant species – a blanket approach that fails to address the variety of special status plant species that will be impacted by this project. Some of these plant species are so rare in California and elsewhere that they are strong candidates for federal and/or state Endangered Species Act protections, and it is mystifying why the County would want to push them closer to that threshold by requiring substandard conservation. Please justify the use of a single mitigation ratio for all the rare plants. While the FEIR mentions the mitigation ratios for special status plant species from three other projects, two of which are in the western Mojave desert, to our knowledge, none of the projects have actually successfully achieved the required mitigation.

ADD-F.2-27

It is still unclear from what we could find in the FEIR if there is actually adequate habitat to set aside for the special status plant species in the mitigation/preservation lands. Instead the FEIR relies on unquantified amounts on occupied habitat in the mitigation/preservation lands for the impacted plant areas and instead uses terms such as "vast", "largest", "many acres". It is impossible for decision makers or the public to be able to evaluate if even the proposed 2:1 mitigation is actually achievable. As state above, we believe that a higher mitigation ratio is needed for the less common/more threatened special status plant species, so a quantifiable evaluation of habitat by species is necessary in a supplemental EIR.

ADD-F.2-28

In addition, because so little is known about the habitat preferences of these special status plant species coupled with the documented failure of transplanting plants into unoccupied habitat (see our comment letter on the DEIR), the proposal of "creation" as a mitigation option fails to meet the standard of mitigation. It is also unclear what measures would be used to enhance the existing populations of the rare plants. The RWMP does even mention the crownscale or Mojave spineflower. While it mentions the California androsace, round-leaved filaree, sylvan scorzonella and adobe yampah (RWMP -Appendix B - pdf pg. 125), it does not provide any information on how enhancement would be done. Lastly, the FEIR relies on unproven "expansion" of the location population to provide the assurances that the local populations of each special status plant species would "be sustained in perpetuity". Please provide the documentation of successful "expansions" of existing special status plant species populations in the revised and updated EIR.

ADD-F.2-29

As with many of the plans that are identified but not provided in the DEIR, and that we identified in our comments on the DEIR, here again, the Special Status Plant Species Restoration Plan (DEIR MM 7-1 beginning on page 5.7-173 as modified in the FEIR at 2-158) needs to be drafted and made available for public review and comment, in order for decision-makers and the

ADD-F.2-30

public to be able to evaluate the effectiveness of the proposed plan to reach the goals of mitigation efforts. ADD-F.2-30 cont.

We failed to find the documentation that supports the statement in the FEIR (FEIR at 2-155) that "Grassland communities in the Mitigation Preserve were subsequently studied to ensure their composition was similar and the quality was the same or better." Please provide these data in a supplemental EIR. ADD-F.2-31

V. The FEIR Does Not Adequately Mitigate Impacts Native Grasslands, Wildflower Fields, and Rare Plants.

The approach presented in the FEIR at Appendix 5.7-E pg 5.7-62, as edited, appears to set up a conflict of interest for the mitigation. While it allows the Tejon Ranch Conservancy to "adopt, update...and enforce the implementation of the RWMP", the Conservancy is almost wholly reliant upon Tejon Ranchcorp for funding for implementation of the RWMP. A worst case scenario could occur where funding for updating, monitoring and enforcement of the mitigation may simply not be provided by Tejon Ranchcorp in order for the Conservancy to follow through on the proposed mitigation and management in perpetuity. Any Tejon Ranchcorp pressure on the Tejon Ranch Conservancy may result in the adoption of RWMP update where subsequent monitoring and enforcement is insufficient to assure that the goals of the mitigation requirements are met in perpetuity. Therefore, the County, as the responsible lead agency, needs to include requirements for financial endowments and necessary mitigation plans as part of the EIR process in order to assure that the mitigation requirements will actually be implemented to off-set impacts from this new remote development. In addition, the RWMP does not qualify as "mitigation" under CEQA because it can be changed by Tejon and is thus vague and not necessarily enforceable against Tejon or future entitlement holders. ADD-F.2-32

The approach to the proposed mitigation—"regardless of the specific resource impacts" (FEIR at 2-123)—is a wholly inadequate. This approach fails to assure that adequate conservation will occur to off-set the proposed project impacts. For example, if the initial development phase impacts native grasslands, wildflower fields and rare plants and the initial mitigation/preservation area puts a conservation easement on oak woodland-dominated landscape, that does nothing for conserving the impacted native grasslands/wildflower fields/rare plants. Because there is no guarantee that the proposed project will actually be developed as proposed, the County needs to require a "lock-step" approach to project impacts and project mitigation, by requiring that the impacted resources are actually mitigated by the mitigation action. This mitigation strategy assures that the impacted resource is actually mitigated and is the standard operating procedure for projects though out the State. The proposed inadequate mitigation strategy must be revised in an updated and recirculated EIR. ADD-F.2-33

The FEIR goes into great discussion about the resources that will be conserved by the Tehachapi Uplands Multiple Species Habitat Conservation Plan (TUMSHCP). However, the Centennial project is not a "covered" project under that TUMSHCP and therefore the lands set aside under that plan for conservation purposes only mitigate for the "covered activities" identified in the HCP. ADD-F.2-34

The FEIR still fails to address the temporal loss of oak woodlands. It is also unclear how the proposal to mitigate oak/oak woodlands loss within the project footprint will be adequately ADD-F.2-35

mitigated by planting more oaks within existing oak woodlands. In fact this approach may impact the existing oak woodlands. If oaks are recruiting naturally within the existing oak woodlands, adding additional oaks as part of the mitigation may impact the existing oak woodland by exceeding the carrying capacity of the oak woodland landscape. If oaks are not recruiting naturally within the existing open space areas, then the implementation of the RWMP is not achieving its goals and that situation does not support reliance on the RWMP to conserve the mitigation/preservation areas. A better strategy would be to avoid the oaks/oak woodlands. ADD-F.2-35 cont.

The mitigation strategy for wetlands is unclear. On Page 2-163 which states "Wetland Waters: 2:1, including 1:1 restoration and 1:1 enhancement, of wetland waters", does that mean restoration of existing on-site wetland waters coupled with enhancing wetland waters will mitigate impacts to all types of impacted wetlands? How does this simplistic strategy mitigate the diversity of wetland waters that will be impacted on the site? The proposed 1:1 preservation: disturbance mitigation ratio also fails to ensure no net loss of wetlands, because it allows half of the currently existing wetlands to be lost. ADD-F.2-36

The FEIR states that a Streambed and Wetland Habitat Creation and Enhancement Plan will describe the performance criteria (FEIR at 2-164), yet this critically important plan is not available in the FEIR and therefore unavailable for County decisionmakers and public to review in order to evaluate the effectiveness of the proposed mitigation. ADD-F.2-37

While the FEIR now recognizes that all the lands already under Conservation Easement held by the State of California's Wildlife Conservation Board and paid for by California taxpayers are inappropriate to be used for mitigation/preservation, these lands are also unsuitable to be used for "creation" of habitat as well. Despite the documented overwhelming failures of habitat "creation", in this instance, the conservation easement was acquired to protect the existing on-site resources. Any "creation" of habitat for mitigation would impact and displace existing functional habitat. Therefore the County needs to remove habitat creation as an activity on preservation lands with Wildlife Conservation Board Conservation Easements and only allow habitat enhancement and restoration to occur in existing degraded habitat. We note that the existing degraded habitat is a result of current RWMP implementation, so the County needs to require a management plan for the mitigation/preservation lands that have a much higher standard of appropriate stewardship than is included in the RWMP in order to reach the County's mitigation goals. ADD-F.2-38

We also question the County's commitment to protecting resources within Los Angeles County by letting the mitigation occur primarily outside the boundaries of the County – in this case in Kern County. This precedent is deeply troubling and does nothing to help preserve the incredible biodiversity in Los Angeles County that the County purports to care about conserving. ADD-F.2-39

Finally, many of the mitigation measures in the FEIR rely upon future homeowner associations (HOAs) for enforcement via Covenants, Conditions, and Restrictions (CC&Rs). Yet, CC&Rs can quite easily be modified by a vote of an HOA board or by the property owners. As such, such mitigation measures do not meet CEQA's standard of being binding and enforceable. ADD-F.2-40

VI. The FEIR Does Not Adequately Inform the Decisionmakers of the Growth-Inducing Impacts of the Project.

The FEIR continues to claim that the Project will not result in significant growth-inducing impacts. This is belied by common sense—surely a city of 60,000 people in a previously undeveloped area is likely to lead to additional development near to that city. Although not disclosed in the FEIR, the SR 138 EIR notes that "The proposed Centennial development in Tejon Ranch would include a Kaiser Permanente facility…" (SR 138 EIR at 88.) Large facilities such as hospitals are likely to serve as "anchors" that facilitate or lead to additional development in that area. ADD-F.2-41

The FEIR similarly repeats the fiction that merely because infrastructure would be "sized" to fit the Project, the Project would not lead to growth in the surrounding area. (FEIR at 2-618.) This simplistic outlook ignores the fact that that extending existing infrastructure is far easier and less costly than developing entirely new infrastructure. ADD-F.2-42

The FEIR likewise suggests that current zoning and land use plans would limit any future growth. (FEIR at 2-618.) This type of reliance upon existing zoning was expressly rejected in *Stanislaus Audubon Society, Inc. v. County of Stanislaus* (1995) 33 Cal.App.4th 144, 152 which held that the development of a golf course triggers the need to study potential growth-inducing impacts such as residential development even if no such development is currently proposed. In that case, the agency claimed that the proposed project could not be growth-inducing because the acreage surrounding the site was not developable given that it was zoned for agriculture. (*Id.* at 157.) The Court held that fact was not determinative. (*Ibid.*) Here, the mere fact that lands surrounding the Project may currently be zoned for (or protected as) open space or agriculture does not excuse the County from taking a hard look at how developing a city here could lead to growth in the surrounding area. ADD-F.2-43

VII. The FEIR Does Not Disclose The Environmental Impacts of Centennial's Water Usage.

The Project will require constant annual groundwater extraction of 1,634 acre-feet per year, which is the equivalent of over 532 million gallons. The Regional Water Quality Control Board expressly disagreed with the FEIR's conclusion that water supply impacts were "less than significant." (DEIR at PDF 270) The Board further concluded that "**the cumulative groundwater demand from the projected development across the Antelope Valley as a whole may not be sustainable in the long-term**." (FEIR at PDF 270, emphasis added.) The FEIR offers no persuasive justification of why the Board is incorrect. ADD-F.2-44

The FEIR attempts to gloss over the massive amounts of water usage needed for the Project by indicating that Tejon has already executed contracts for water supplies and that the local water district is obligated to supply certain amounts of water to Tejon. (FEIR at 2-1178.) However, whether Tejon has executed certain contracts is irrelevant to the environmental effects of the Project's water usage. Water in California is an extremely limited and finite resource, and the allocation of water to the Project likely will mean that water will not be available for other purposes such as agriculture, instream flows and environmental benefits, or urban use. The mere fact that Tejon has executed contracts does not in any way account for the environmental effects of this water usage. ADD-F.2-45

VIII. The FEIR Fails to Provide Any Justification For This Environmentally Harmful Sprawl Project.

In attempting to provide a justification this harmful sprawl project, the EIR grossly distorts the findings of a California State Legislative Analyst's Office Report (the "Report"). The FEIR claims that the report concludes that an additional 100,000 units must be built annually and "and these units must be located almost exclusively in California's costal metro areas, including Los Angeles County." (FEIR at 2-537.)

The report actually states: "On top of the 100,000 to 140,000 housing units California is currently expected to build, our analysis suggests that the state probably would have to build as many as 100,000 additional units annually—***almost exclusively in its coastal communities***—to seriously mitigate the state's problems with housing affordability. Adding this many new homes, however, could place strains on the state's infrastructure and natural resources and could alter the longstanding and prized character of California's coastal communities."[3]

At over 50 miles from the coast, the project site is not in a coastal community, nor in proximity to a coastal community. In fact, the desert city of Palmdale is closer to the coast than the project site. The Report defines "coastal communities" as land beyond the 25 mile radius of California coastal metros (which would almost surely exclude the Project site, which is 65 miles from downtown Los Angeles). (Report at 19.) The report further recommends "building on coast, less inland," and "***more building in central cities, less in outlying areas***." (Report at 21-22, emphasis added.) In short, the report recommends the opposite of the type of development proposed here.

ADD-F.2-46

While California has a housing shortage, that shortage is specific to locations in which existing jobs are located, such as the LA Metro. The Centennial site is at least an hour's drive from the LA Metro, and thus will do nothing to alleviate the housing shortage in the LA Metro. To the extent some people living in Centennial will work in the LA Metro, they will necessarily endure sitting in their cars for multiple hours each day, further adding to our County's air pollution, greenhouse gas, and traffic burdens. Studies show that the long commutes that Centennial residents will necessarily endure lead to higher depression rates, obesity, and even higher divorce rates.[4] Tejon's promises of bike trails and walking paths will not change the fact that Centennial is a sprawl project necessitating unhealthy commutes. Housing growth should be centered near existing jobs.

ADD-F.2-47

On a broader level, there will likely always be a shortage of housing in California because California's natural resources and diverse economy make it a desirable place to live. Yet, we cannot pretend that California's wildlands and water resources are infinite and can accommodate more sprawl development without inflicting serious damage on California's natural heritage and degrading the quality of life for Californians.

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[3] Legislative Analyst's Office, *California's High Housing Costs: Causes and Consequences* (March 2017), http://lao.ca.gov/reports/2015/finance/housing-costs/housing-costs.pdf.

[4] *See* Matthews, Stephen, *Do YOU have a long commute? You're more likely to be depressed and stressed, study finds*, DAILY POST, May 22, 2017, http://www.dailymail.co.uk/health/article-4529480/Do-commute-work-likely-depressed.html (last visited June 5, 2018); *Divorce Study Shows that Couples with Longer Commutes are More Likely to Divorce*, HUFFINGTON POST, Aug. 13, 2013, https://www.huffingtonpost.com/2013/08/13/divorce-study_n_3751641.html (last visited June 5, 2018); Sandow, Erika, *Till Work Do Us Part- The Social Fallacy of Long Distance Commuting*, 51 Urban Studies 3 (2014), available at http://www-sre.wu.ac.at/ersa/ersaconfs/ersa10/ERSA2010finalpaper732.pdf.

IX. The FEIR Includes an Incomplete Analysis of Potential Alternatives to the Project.

As the Conservation Groups' and other members of the public described in their comments, the Project as currently proposed will result in significant impacts on a host of environmental issues. Nonetheless, when analyzing potential alternatives that could eliminate or minimize these impacts the FEIR includes an incomplete analysis and dismisses earlier concerns raised by the Conservation Groups.

In particular, Conservation Groups noted that the EIR lacked a thorough and well-supported infeasibility analysis for the alternatives, including the No Project Alternative and the Public Input Alternative. The Public Input Alternative offered a pathway for the Project to reduce its impacts on vulnerable wildlife and sensitive species but was summarily dismissed. (DEIR at 8-13.) Other alternatives such as Alternative C and E that would also have reduced environmental impacts were also rejected with limited and incomplete analysis. (DEIR at 8-44; 8-59-60.) Most troublingly, the EIR failed to consider alternatives that would significantly reduce the Project's development footprint and thereby truly address the Project's significant environmental impacts. The EIR cites overly narrow project objectives to reject potential alternatives and fails to provide substantial evidence to support its claim that a smaller project would be infeasible. This approach violates CEQA. Under CEQA, "the public agency bears the burden of affirmatively demonstrating that, notwithstanding a project's impact on the environment, the agency's approval of the proposed project followed meaningful consideration of alternatives and mitigation measures." (*Mountain Lion Foundation v. Fish & Game Com.* (1997) 16 Cal.4th 105, 134.)

ADD-F.2-48

Similarly, other commenters noted the EIR's failure to consider a proper range of alternatives improperly left out less ecologically damaging development alternatives. (FEIR at 621-22 [Letter from Santa Monica Mountain Conservancy at 3-4].) The alternatives analysis also fails to consider a single alternative that would maintain contiguous habitat linkage from project-adjacent overcrossing to Highway 138 and open space south of the highway. (*Id.*)

In response, however, the FEIR provides conclusory responses and repeatedly claims the DEIR's limited alternatives analysis and related infeasibility conclusions are sufficient. (FEIR 2-417.) When pushed on why the EIR failed to consider a smaller development footprint and less ecologically damaging, the FEIR attempts to pass the blame on the "policies and "community vision" of the AVAP. (FEIR 2-422-423; 2-654-56.) However, the FEIR presents an overly narrow interpretation of the AVAP that mandates the development footprint as currently proposed Project and rejects a smaller scale version Project. (FEIR 2-423-24; 2-663-669.) This approach is not supported by the text of the AVAP or CEQA.

ADD-F.2-49

X. The FEIR Remains Inconsistent with the Antelope Valley Area Plan.

While the FEIR touts, in part, the proposed Project's consistency with the AVAP to justify its alternative analysis, it is clear that elsewhere in the EIR the Project remains inconsistent with the polices of the AVAP. As the Conservation Groups noted the Project is inconsistent with the Land Use and Mobility element policies that emphasize the need to reduce GHG emissions, promote alternatives to automobile or minimize vehicle trips. Similarly, the proposed Project conflicts with the Conservation and Open Space or Public Safety, Services and

ADD-F.2-50

Facilities Element by failing to identify sustainable water sources or avoid natural hazards including seismic and fire prone areas.

These concerns were not unique to the Conservation Groups. CDFW raised similar concerns about inconsistencies between the proposed Project and the AVAP. (FEIR at 177 [CDFW DEIR Letter at 20-22.) CDFW noted that AVAP Goal Land Use 2 is a "land use pattern that protects environmental resources" and the DEIR claims the Project is consistent with that goal throughout the preservation of the SEA, biological mitigation lands and Tejon Ranch Land Use and Conservation Agreement. (Id. at 21.) However, the proposed Project allows for lands deemed "open space" to be used for a variety of uses, including but not limited to, gold courses, fish hatcheries, nurseries for growth and sale, stables, helispots, helipads, wineries, cemeteries, amuset rides, outdoor festivals and fair, crop production and model home complexes. None of these potential uses will adequately protect environmental resources. Additionally, CDFW points to the proposed Project's failure to protect wildlife corridors and movements, sufficiently avoid riparian areas and sensitive habitat. (*See* CDFW DEIR Letter at 21-22.) These failures are in conflict with the AVAP Land Use goals as well as the Conservation and Open Space goals.

ADD-F.2-50 cont.

Though the FEIR attempts to address some of these concerns by making minor changes to the EIR, many of the inconsistencies raised by Conservation Groups and CDFW remain unaddressed. (FEIR at 2-174-5.) Rather than revise the EIR to address the gaps and inconsistencies and gaps pointed out in comments, the FEIR dismisses the comments as misinterpreting or interpreting the AVAP policies too strictly or pointing to other policies in the AVAP that the Project does comply with. (FEIR 2-180-181; FEIR 2-1203-6.) Consistency with *some* of the AVAP plan does not absolve the EIR of inconsistencies of the AVAP elsewhere. Despite the FEIR's claim otherwise, the Project's numerous inconsistencies with the AVAP will result in significant impacts on the physical environment because those inconsistencies undermine the AVAP goals to protect vulnerable species, wildlife connectivity and habitat—all necessary for species to survive and thrive. (FEIR 2-1207.)

ADD-F.2-51

XI. The FEIR's GHG Emissions Analysis and Mitigation Measures are Inadequate.

Conservation Groups, along with other commenters, raised concerns with the Project's tremendous GHG emissions and inadequate mitigation measures. In particular, the EIR's assumption on vehicle miles traveled (VMT) and underestimates of offsite trip by residents suggest as well as the EIR's failure to adopt all feasible mitigation measures to address VMT, energy use, waste, water consumption, construction and on-site renewable energy generation. While the FEIR provided lengthy responses to those concerns, it failed to adequately address or revise the EIR in response to those comments. The Conservation Groups are still reviewing the hundreds of pages of responses to comments in the FEIR addressing GHG emissions and will provide more comprehensive comments once the Conservation Groups have completed their review. In the meantime, the Conservation Groups remain concerned about the Project's substantial GHG emissions, missed mitigation opportunities for those emissions and the Project's impact on California's ability to meet its climate change goals.

ADD-F.2-52

XII. Conclusion.

In light of many significant, unavoidable environmental impacts that will result from the Project, we strongly urge the Project not be approved. Please vote for a sustainable LA County by saying no to Centennial. ADD-F.2-53

Sincerely,

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(Attached on USB)

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Response to Comment Letter ADD-F.2
Center for Biological Diversity/California Native Plant Society
June 5, 2018

Response to Comment ADD-F.2-1:

Thank you for your comment and for your participation in this public process. This introductory comment is noted and will be provided to the Regional Planning Commission and Board of Supervisors for consideration. This comment claims that the Final EIR did not adequately respond to comments raised in the letter designated as "F.8" in the Final EIR. Since this comment fails to identify specific examples of the purportedly deficient responses and does not otherwise raise any specific concerns regarding the adequacy of the EIR, no further response is required. Please also see response to Comment F.8-20, which considers whether the Project is fairly characterized as sprawl development in the context of long-range regional planning documents implemented by the Project, such as Southern California Association of Government's (SCAG's) Sustainable Communities Strategy/Regional Transportation Plan and the Los Angeles County General Plan.

Response to Comment ADD-F.2-2:

This comment is substantially similar to Comments F.8-15 and F.8-16 set forth in the Final EIR. This comment references MM 10-25, which obligates the Project to implement a Mobility Plan that requires the establishment of a Transit Management Association (TMA) charged with implementing transit and transportation measures intended to ensure that a minimum of 20 percent of total off-site peak hour commutes are completed by using transit modes other than single occupancy vehicles. Final EIR responses to Comments B.3-2, F.9-11, F.8-15, and F.8-16 comprehensively explain how the TMA will be required to implement a monitoring and adaptive management process to verify compliance with MM 10-25's performance standard over time, as well as the County's authority to deny the approval of any tentative tract map (TTM) application, and/or require additional CEQA analysis, should monitoring demonstrate that such performance standards are not being achieved. Thus, the EIR does describe plans and policies to achieve and enforce MM 10-25's performance standards, and does demonstrate a high likelihood of MM 10-25 implementation, despite this comment's claim to the contrary. With respect to this comment's assertion that the Project constitutes "urban sprawl," please see response to Comment F.8-20, which considers whether the Project is fairly characterized as sprawl development in the context of the long-range regional planning implemented by the Project.

Response to Comment ADD-F.2-3:

Contrary to this comment, responses to Comment B.3-2 and F.8-11 comprehensively explain how the Project land use approval process required by the Specific Plan, the implementation of the Subdivision Map Act by the County, and the County's enforcement of the MMRP will together ensure that future Project development, including residential, commercial and employment-generating land uses, occurs in a balanced manner, with traffic levels that do not deviate significantly from projected levels. If Project development does not proceed as

projected, the County may deny the TTM application, or additional CEQA analysis would be required if any significant deviation were to occur.

Response to Comment ADD-F.2-4:

With regard to this comment's concerns regarding the TTM approval process and its ability to ensure that commercial and residential development will occur in a balanced form, please see responses to Comments ADD-F.2-3, ADD-B.3-2, and ADD-F.8-11. With regard to this comment's request for clarification as to whether TTM applications will be treated as ministerial or discretionary actions, both Specific Plan Section 4.53 and Specific Plan Appendix 3-B are clear that TTM applications will be treated as discretionary actions subject to CEQA compliance. Indeed, Public Resources Code § 21080(a) expressly states that tentative subdivision map approvals are discretionary actions subject to CEQA. With respect to this comment's request for clarification as to whether final subdivision maps will be treated as ministerial actions, both Specific Plan Section 4.53 and Specific Plan Appendix 3-B, Implementation Matrix, are clear that final maps will be treated as ministerial actions. This is consistent with CEQA Guidelines § 15268(b), which expressly states that all final map approvals are presumed to be ministerial and thus not subject to CEQA. This comment's claim that the "Final EIR sharply limits which County actions would be construed as 'discretionary'" is incorrect. The Final EIR is an informational document that has no independent regulatory effect.

Response to Comment ADD-F.2-5:

As explained in response to Comment B.3-2, in the event that the Project's residential development were to occur prior to the proposed onsite employment or commercial land uses, the environmental and traffic analysis required for each TTM would find that Project-related traffic differs from the traffic volumes and patterns considered in the EIR. If these differences are found to generate new or more severe significant impacts, a subsequent environmental impact report, additional public and agency review, and future feasible mitigation to avoid or reduce Project traffic-related impacts under the conditions documented during the TTM review and approval process would be required before any additional development is approved. This comment references a provision of Centennial Specific Plan Section 4.5, which requires the County's Planning Director to approve certain requested changes to the phasing design of an approved Tentative Map, as evidence that the response to Comment B.3-2's conclusion is unsound. However, Section 4.5 provision would not allow the applicant to "make significant changes to the project design and to project without any discretionary decision-making by the County," as this comment claims. Rather, Section 4.5 expressly states that it applies only to requested changes to the order or configuration of project phasing that are in "substantial conformance" with the approved Tentative Map and thus would not allow "significant changes" to the project design without discretionary review. Indeed, as provided in Specific Plan Sections 4.5.3.2 and 4.5.3.3, any requested "significant change" to an approved Tentative Map would require either a discretionary Tentative Map Amendment approval or a discretionary Revised Tentative Map approval, depending on the nature of the requested change.

Response to Comment ADD-F.2-6:

Contrary to this comment, the environmental effects of expanding SR-138 in accordance with Caltrans' Northwest 138 Corridor Improvement Project have been fully analyzed in the *Final Environmental Impact Report/Environmental Impact Statement and Section 4(f) Evaluation* (the "NW 138 FEIR"). As discussed in response to Comment B.3-6 and Final EIR Appendix 5.10-C, implementation of Caltrans' preferred alternative for the Northwest 138 Corridor Improvement Project, and additional improvements to SR-138 that may be required under cumulative conditions with full Project buildout, will not result in any new or more severe significant physical construction and operational impacts than considered in the NW 138 FEIR. The Project's potential impacts on wildlife movement were also fully analyzed in Draft EIR Section 5.7, Biological Resources. Please also see responses to Comments B.2-9, B.4-56, B.4-57, F.3-23, F.3-25, F.5-2 through F.5-7, F.7-16, F.7-21, F.8-168, F.8-109, and F.8-110, which respond to prior comments concerning the Project's impact on wildlife movement in relation to SR-138.

Response to Comment ADD-F.2-7:

This comment's suggestion that that Caltrans' Northwest 138 Corridor Improvement Project would not be constructed but for the Project is not supported by fact. As explained in response to Comment F.8-28, the Northwest 138 Corridor Improvement Project has been under consideration by Caltrans since 2004 to accommodate projected growth in North Los Angeles County that will occur whether or not the Project is ever approved. See also responses to Comments F.8-7, F.8-20, and F.8-28, which detail the history and purpose of the Northwest 138 Corridor Improvement Project.

Response to Comment ADD-F.2-8:

Contrary to this comment, as discussed Draft EIR Section 5.10, Traffic, Access, and Circulation, mitigation measures identified in the EIR would reduce traffic impacts to a less than significant level. However, as discussed on Draft EIR page 5.10-130, although mitigation measures identified for Caltrans facilities would reduce direct Project impacts to a less than significant level, it is outside the control of the County to implement these measures and this direct impact is thus conservatively considered to be significant and unavoidable. Similarly, as discussed on EIR page 7-19, for 2035 cumulative conditions, the SR-138 was analyzed consistent with the Northwest 138 Corridor Project being advanced by Caltrans, and while the Project's cumulative traffic impacts would be less than significant with implementation of identified mitigation measures, the EIR conservatively determined that this cumulative Project impact would be significant and unavoidable because the County cannot require Caltrans to implement planned and needed improvements to State highway facilities. The Traffic Mitigation Agreement referenced in this comment would provide funding for the planning, design, and construction of certain improvements. However, if the improvements are not constructed by Caltrans, potential Project impacts would be significant and unavoidable. However, as discussed above, and as explained on page 5.10-130 of the Draft EIR, the County (as the Lead Agency) lacks jurisdiction and control over Caltrans and State highway facilities and thus cannot mandate the construction of improvements to these

facilities or require that Caltrans and the Project Applicant/Developer enter into a Traffic Mitigation Agreement as a condition of Project approval. Please see responses to Comments F.8-22 through F.8-33 for further discussion of this issue. With respect to this comment's concerns regarding the impacts associated with the construction of the Northwest 138 Corridor Project, both the NW SR-138 Draft EIR and Final EIR and the Antelope Valley Area Plan EIR evaluate the environmental effects of the Northwest 138 Corridor Improvement Project, as discussed in response to Comment F.8-33. Furthermore, as discussed in response to Comment B.3-6 and Final EIR Appendix 5.10-C, implementation of Caltrans' preferred alternative for the Northwest 138 Corridor Improvement Project, and additional improvements to SR-138 that may be required under cumulative conditions with full Project buildout, will not result in any new or more severe significant physical construction and operational impacts than considered in the NW SR-138 FEIR.

Response to Comment ADD-F.2-9:

With respect to this comment's concerns regarding the EIR's internal vehicle trip determinations, please see response to Comment F.8-23, which explains the substantial evidence supporting the EIR's trip counts. This comment's suggestion that the EIR's internal trip assumptions are unsupported by substantial evidence based on the Commenter's interpretation of the Northlake Specific Plan EIR misses the mark for at least two reasons: first, it is falsely presumes that the Centennial EIR's internal vehicle trip counts relies on a determination that "significant numbers of people will work onsite" and, second, it is predicated on the false notion that the Northlake Specific Plan is comparable to the Centennial Specific Plan in terms of on-site amenities that incentivize internal trips. Responses to Comments E.1-2, F.7-15, F.8-9, F.8-22, F.8-23, F.8-45, F.8-82, F.8-197, and F.8-200 detail the expert modeling and substantial evidence that support the EIR's traffic impact determinations and address the Commenter's claim that the EIR's traffic counts rely on an expectation that most on-site jobs will be staffed by project residents. Moreover, as compared to the Northlake Specific Plan, the Centennial Specific Plan proposes far more on-site commercial, employment, recreational, educational and institutional land uses[3253] to encourage internal travel patterns by Project residents similar to those projected to occur in the Lancaster/Palmdale and Santa Clarita Valley areas when the region is built out, as discussed in response to Comment F.8-13.[3254, 3255, 3256] Finally, contrary to this comment, the EIR never claims that the Project is "assured" to achieve the EIR's projected internal average trip count. In fact, as discussed in responses to Comments F.8-15 and F.8-16, the Project will be required to implement a monitoring and adaptive management process to verify compliance with the MMRP's mobility performance standards, which will be enforced

[3253] Compare Northlake Specific Plan EIR pages 4-5 through 4-24 with Centennial Specific Plan EIR pages 4-12 through 4-44.

[3254] H. Schroeder, SCV *Growth Is It's Future*, The Signal: Santa Clarita Valley, Nov. 7, 2016: https://signalscv.com/2016/11/scvs-growth-future/

[3255] Shlomo Angel, Alejandro M. Blei, The Productivity of American Cities: How densification, relocation, and greater mobility sustain the productive advantage of large U.S. metropolitan labor markets. Cities, Volume 51, January 2016, pages 36-51.

[3256] Shlomo Angel, Alejandro M. Blei, The Spatial Structure of American Cities: The great majority of workplaces are no longer in CBDs, employment sub-centers, or live-work communities. Cities, Volume 51, January 2016, pages 21-35.

through the TTM approval process if monitoring demonstrates that such performance standards are not being achieved.

Response to Comment ADD-F.2-10:

This comment inaccurately claims that the EIR determined that 65 percent of Project trips would be internal to the Project. In fact, the EIR's traffic modeling shows that only 48 percent of total project trips would be internal to the Project, as discussed in response to Comment F.8-9. With respect to this comment's concerns regarding the evidentiary basis for the EIR's assumptions regarding internal trips, please see responses to Comments ADD-F.2-9, E.1-2, F.7-15, F.8-9, F.8-22, F.8-23, F.8-45, F.8-82, F.8-197, and F.8-200. With respect to this comment's concerns regarding the rates and sequence of residential and commercial development within the Project site, please see responses to Comments ADD-F.2-2 through ADD-F.2-5. In addition, CEQA does not require the EIR to analyze a scenario in which residential and commercial development do not occur concurrently. Substantial evidence supports the reasonable traffic modeling assumptions used in the Draft EIR. An EIR lead agency may make reasonable assumptions about future conditions based on substantial evidence without guaranteeing that those assumptions will remain true. See *Environmental Council of Sacramento v City of Sacramento* (2006) 142 Cal.App.4th 1018, 1036.

Response to Comment ADD-F.2-11:

This comment references Final EIR page 2-540 and its discussion of the various Project alternatives analyzed in SCAG's 2012 RTP/SCS EIR. The referenced discussion, however, does implicate the alternatives analysis included in the Centennial Specific Plan EIR, although this comment mistakenly asserts otherwise. In point of fact, the Project EIR never states that it's "No Project" alternative would generate more VMT or impact more wetlands than would the proposed Project, despite this comment's mistaken assertion to the contrary. As discussed on Final EIR page 2-540, however, the 2012 RTP/SCS EIR did in fact determine that the business-as-usual "No Project" alternative analyzed in that EIR would result in greater VMT and environmental impacts than would 2012 RTP/SCS EIR's preferred "balanced land use plan" alternative.

Response to Comment ADD-F.2-12:

The Commenter's opinion that more thorough analysis is needed regarding the Project site's importance for wildlife movement is noted, but the lead agency disagrees. The Commenter notes that other agencies and organizations commented on the Draft EIR with regard to habitat connectivity and wildlife movement. The lead agency has thoroughly responded to those comments and has revised the EIR in response to them where appropriate. See Final EIR, responses to Comments B.2-3 (letter B.2 is from DWR), B.4-34 through B.4-37, B.4-56 and B.4-57, B.4-75 (letter B.4 is from CDFW), F.3-23 through F.3-25, and F.3A-32 through F.3A-34 (letters F.3 and F.3A are from the Tri-County Watchdogs), F.5-2 (letter F.5 is from the SMMC), F.7-22 (letter F.7 is from the TPLMTC), F.8-109 and F.8-110, and F.8-165 through F.8-169 (letter F.8 is from CBD, CNPS, and CFS). The comment provides no evidence for its assertion that the EIR analysis is inadequate, and no further response is required. With

regard to the AV RCIS, please see Final EIR, response to Comment F.8-172. See also response to Comment ADD-F.2-16 for further discussion of wildlife movement.

Response to Comment ADD-F.2-13:

The Final EIR does not argue that the Project area's biological habitat value is erroneously identified within the AVRCIS. Instead, it is the County's assertion that because of the numerous inaccuracies within the AVRCIS's biological description of the Project site, the scientific integrity of the document is called in to question. The intent of the Draft EIR is to accurately describe the biological value of the Project site, in context to the region in which it occurs. In numerous instances within the Draft EIR, Project impacts were deemed potentially significant and mitigation measures were set forth to bring potential impacts to a less than significant level. At no point does the Draft EIR or Final EIR attempt to argue that the Project area does not have biological value.

The comment is correct that the Final EIR states that a detailed response to the EEMS results map cannot be provided due to the AVRCIS's missing methodology and so precludes the ability for the lead agency to evaluate the methodological details that may have explained the factual errors in this map as confirmed by biological resource experts who completed detailed ground surveys of the project site. A lead agency is not required to accept or validate assertions about the biological value of the Project area given these factual inaccuracies and missing methodologies. Additionally, and as mentioned in the paragraph above, at no point does the Draft EIR or Final EIR attempt to argue that the Project area does not have biological value.

Response to Comment ADD-F.2-14:

This comment incorrectly summarizes the points made in the Final EIR regarding the AVRCIS's evaluation of the Project site. The Final EIR highlights several issues with the AVRCIS, one example being that the Project site is evaluated in a piecemeal fashion by the AVRCIS, while the Draft EIR analyzed the biological region of Western Antelope Valley, including northward into Kern County and up into the Tehachapi Mountains ridgeline. As stated in the Final EIR, the biological resource values on the Project site were considered as part of the mosaic of habitat areas in the region, which vary in quality and connectivity throughout. The Draft EIR includes all the biological resources, inclusive of the three species groups (desert, agriculture/grassland, and foothill/riparian) included in the June Admin Draft AVRCIS.

Response to Comment ADD-F.2-15:

The presence (or absence) of high quality habitat outside of the Project area does not negate the biological value within the Project area. As stated in response to Comment ADD F.2-13, the intent of the Draft EIR is to accurately describe the biological value of the Project site, in context to the region in which it occurs, and in numerous instances within the Draft EIR, Project impacts were deemed potentially significant and mitigation measures were set forth to reduce potential impacts to a less than significant level. At no point do the Draft EIR or Final EIR attempt to argue that the Project area does not have biological value.

The Final EIR prepared by Los Angeles County highlighted certain specific inconsistencies and errors within the biological conditions described in the AVRCIS and noted that the results of the EEMS model could not be reviewed or validated without disclosure of the methodology used (particularly given the clear factual errors created by the model output information included in the AVRCIS. The Final EIR's statement that the Mitigation Preserve areas are identified by the AVRCIS as habitat core areas is accurate but is not a validation or endorsement of the results of the EEMS methodology.

Response to Comment ADD-F.2-16:

The EIR appropriately analyzes potential impacts to habitat connectivity, and the Project design and mitigation would ensure less than significant impacts. In the wildlife movement assessment, connectivity between the Tehachapi Mountains and the San Gabriel Mountains was considered in detail (Draft EIR, pages 5.7-50 to -64, -164 to -170). The thorough assessment concluded that although maintaining baseline connectivity between the two regions is essential, development of the Project would not significantly impact movement between these regions (Draft EIR, page 5.7-166). The wildlife movement impact analysis beginning on page 5.7-164 of the Draft EIR does conclude that development of the Project site will result in some losses of areas that may be used for foraging and/or breeding for species; pathways to or from foraging or breeding grounds on the Project site, such as along ridge-lines or canyon bottoms, may become "dead ends" to through dispersal. However, these losses are not expected to significantly impact wildlife movement, and sufficient habitat connectivity would be retained in the region for these species, especially given the substantial amount of similar terrain in the northwestern Antelope Valley area. Further, two regional conservation plans, the Tejon Ranch Conservation and Land Use Agreement and the TUMSHCP, although not providing mitigation for Centennial, would act in concert with the Centennial mitigation preserves to help sustain the functionality of the regional landscape linkage for future wildlife populations. Multi-generational gene flow (a series of connected wildlife movement events over time, allowing for genes to pass within and between populations) among wildlife populations in the region is expected to be sustained in the open spaces on and off the site that will remain following Project implementation. These open spaces provide sufficient habitat connectivity to allow for such gene flow. Implementation of MM 7-14, which designates a SR-138 wildlife underpass (along with a 50-foot open space buffer) where the current intersection with National Cement Plant Road exists, will also allow for local wildlife movement to pass through the Project area down to SEA 17. The direct impacts of Project development on wildlife movement, therefore, are considered less than significant after mitigation for local wildlife movement impacts. Nonetheless, the Draft EIR (page 7-17) discloses that the Project when combined with other projects in the region would result in a cumulatively significant impact on wildlife movement. Lastly, the Project design is consistent with the Antelope Valley Area Plan (AVAP) including with regard to open space designations, SEA protection, and preservation of habitat linkages.

For a more detailed discussion of wildlife movement within the Project and regionally, please see Final EIR, responses to Comments F.3-23 through F.3-25, B.4-34 through B.4-37, B.4-56 and B.4-57, and F.8-165 through F.8-169.

Response to Comment ADD-F.2-17:

The Final EIR statement that the aqueduct is a substantive barrier to wildlife movement does not minimize the two crossing locations; rather, it is simply a statement of fact. The Final EIR acknowledges the westernmost crossing, stating that wildlife is most likely to pass from the Tehachapi Mountains in the north to the Angeles National Forest in the south (and vice versa) west of the aqueduct where the habitat provides greater cover (see Draft EIR pages 5.7-58 through 5.7-60). The Draft EIR also recognizes the two areas where crossing may be attempted by wildlife by stating that although I-5 and the California Aqueduct substantially reduce the permeability of the linkage for many wildlife species, it remains functional for many species to some degree (see Draft EIR page 5.7-62). The Project EIR analysis is also consistent with the AVAP and its independent EIR with regard to the limited impact on wildlife movement, inclusive of the aqueduct crossings, and that sufficient habitat connectivity would be retained. As stated in the Draft EIR in Section 8.0, Alternatives to the Proposed Project (see page 8-10) and in the Final EIR (page 2-414), the Project's development area was substantially reduced to conform to the boundaries of the West Economic Opportunity Area (EOA) in the Antelope Valley Area Plan (AVAP). The AVAP designated more acres as Sensitive Ecological Areas (SEAs) west of the aqueduct, and the EOA constrained the Project's development footprint and thereby impacts to wildlife movement as well as impacts to other biological resources such as oak woodlands. The County's AVAP was informed by an independent EIR prepared by and for the County and included an assessment of wildlife movement in establishing both SEA and EOA boundaries. Commenter's lawsuit challenging the AVAP and EIR was recently rejected by the California appellate court, which upheld the AVAP, SEA boundaries, and specific challenges raised by the Commenter in the litigation context to the West EOA Project area. (See *Center for Biological Diversity v. County of Los Angeles*, No. B284427 (Los Angeles Super. Ct. 2nd Dist. June 19, 2018).)

Response to Comment ADD-F.2-18:

The pronghorn is not on the CDFW list of Special Animals, and CDFW in fact occasionally issues permits for hunting of the Antelope Valley pronghorn population, but the Draft and Final EIR specifically acknowledge that there is an interest in maintaining this herd. (Draft EIR page 5.7-153; Final EIR, response to Comment B.4-35) The EIR therefore provides an impact analysis which is consistent with standard practices for sensitive species and the best available scientific information, including on-site observations, in suitable habitat areas. Pronghorn have reportedly been seen on rare occasions in random locations in the region but have been commonly observed and are known to primarily occupy the western portion of the site (upper Oso Canyon in particular), which is preserved mitigation open space and other locations along the foothills continuing to the northeast, which is also preserved mitigation open space. (Draft EIR, pages 5.7-128, 5.7-153) Since release of the Draft EIR, additional population distribution information has also been obtained from the Tejon Ranch Conservancy and is presented in the Final EIR (see Final EIR, Exhibit B.4-34, which indicates the primary usage area for pronghorn along the Tehachapi foothills, predominantly northeast of the Project site). As noted in the Final EIR, the Project's crossing opportunity under SR-138 connecting areas of appropriate habitat would serve the pronghorn. (Final

EIR, response to Comment B.4-36) Further, the RWMP requires the Project Applicant to work with the Tejon Ranch Conservancy to identify and implement potential enhancement measures for pronghorn that are also supported by CDFW. (Final EIR, response to Comment B.4-35) Creating additional crossings over the California Aqueduct within the interior of developed portions of the Project could cause harm to pronghorn by creating greater risk for interaction with humans, vehicular traffic, and other potential conflicts associated with development. (*Ibid.*) Avoidance of developed areas is preferred to minimize such potential harm to this species. The Commenter provides no evidence that this is "unfounded," and no further response is required. With regard to the solo male pronghorn observed at Peterson ranch, individual pronghorn are considered outliers that have been found outside the known occurrence area – unless occurrence is repeated, it is typically considered a single event and not evidence of a population trend or expanded distribution. (Final EIR, response to Comment B.4-37) The Final EIR recognizes it is possible this observation is evidence of as-yet unidentified expansion, but no further analysis is required given the species' regionally limited but non-special status and scope of analysis already contained in the EIR. (*Ibid.*; Draft EIR, page 5.7-127) The Commenter provides no evidence to the contrary, and no further response is required.

Response to Comment ADD-F.2-19:

Numerous studies on wildlife movement have been conducted on the Project site as well as throughout the Project region and were used to inform the wildlife movement discussions in Section 5.7.3, Environmental Setting, and Section 5.7.6, Environmental Impacts, of the Draft EIR.

In the wildlife movement assessment, connectivity between the Tehachapi Mountains and the San Gabriel Mountains/Angeles National Forest was considered. The assessment, which used various scientific studies, concluded that although maintaining baseline connectivity between the two regions is essential, development of the Project would not significantly impact movement between these regions. (Draft EIR, page 5.7-166). However, in order to lessen Project impacts on wildlife movement, MM 7-14 designates a SR-138 wildlife underpass (along with a 50-foot open space buffer) at the current intersection of the California Aqueduct and National Cement Plant Road; the width of the underpass shall be 100 feet and flare out on both sides of the highway to a 150-foot width in the Project open space adjacent to the highway. This will let local wildlife pass between open space areas on opposite sides of the highway and accommodate infrequent regional movement from areas northwest of the Project site to areas south of the Project site. The additional underpass to be constructed under SR-138 further to the east is also expected to provide some local movement for animals within the Project area. This undercrossing is consistent with the Antelope Valley Area Plan, and both undercrossings provide for connectivity for local wildlife movement across SR-138. Commenter's generalized assertions provide no evidence to the contrary, and no further response is required. See Final EIR, responses to Comments B.4-56, B.4-57, F.3-23 through F.3-25, F.5-2 through F.5-7, F.7-16, F.7-21, F.8-109, F.8-110, and F.8-168 for further discussion.

Response to Comment ADD-F.2-20:

The Commenter's opinion that the EIR analysis, Final EIR revisions to Draft EIR and mitigation measure text, and responses to government agency and organization comments are inadequate is noted, but the lead agency disagrees with this assessment. The lead agency has thoroughly and appropriately analyzed potential impacts to special status species and evaluated and incorporated all feasible mitigation including in many cases as suggested by the agencies and others listed in this comment. This comment does not provide specific examples or evidence of inadequate analysis or mitigation, and no further response is required.

Response to Comment ADD-F.2-21:

As the Commenter notes, Draft EIR Table 5.7-2 catalogs and describes surveys conducted on the Project site from 1999 to 2015. (Draft EIR pages 5.7-21 through 5.7-23) Several biological surveys and assessments were updated in 2015 because it was determined that this was necessary, including the California condor assessment, special status plant survey, jurisdictional delineation with functional assessment/California Rapid Assessment Method (CRAM) analysis, and tricolored blackbird surveys and analysis. Resources surveys were not updated where previous data remains accurate due to one or more of the following reasons: new Project areas are not expected to contain the resource; lack of measurable change in site conditions; past surveys were conducted within acceptable timeframe typical for that resource; surveys have been repeated in the past with identical results; regulatory status/survey requirements have not changed in a manner that would require a survey update; and/or drought conditions have contributed to general consistency of site conditions over the past five to six years. (Draft EIR pages 5.7-23, 5.7-24) Further, MM 7-5 requires focused surveys for applicable special status species within the appropriate season in the year prior to the initiation of activities that would cause impacts. An appropriate environmental baseline has been established for EIR analysis of potential impacts to special status species. The Commenter's generalized assertion provides no evidence to the contrary, and no further discussion is required. Please see also Final EIR, response to Comment B.4-58.

Response to Comment ADD-F.2-22:

It is certainly true that species populations can shift or expand over time, assuming that potentially suitable habitat evolves to accommodate such shifts. However, environmental conditions on the Project site have not notably changed and, therefore, there is no evidence that the suitability for occupation of the various species on the Project site has changed. For example, earlier surveys occurred during non-drought years when vegetation was more plentiful and could potentially support higher wildlife population levels for this species. During the extended drought years that occurred after the most recent field surveys, less vegetation and lower population levels are likely, but relying solely on drought-year (e.g., 2015) survey data could understate the population and occurrence of this species during normal and wet years. In addition, multiple focused protocol surveys have been conducted for special status species with higher potential for variability in occupation such as the least Bell's vireo, southwestern willow flycatcher. and tri-colored blackbird. To

provide still greater certainty that these species are not impacted, the Draft EIR contains mitigation requiring focused surveys within the year prior to construction, in the appropriate season for that species, for many of the special status species with potential to occur on site such as burrowing owl, least Bell's vireo, southwestern willow flycatcher, arroyo toad, and California red-legged frog to name just a few. Although pre-construction surveys and related mitigation requirements are provided to ensure that individuals of these special status species are not impacted by Project construction, the survey history on the Project site has provided a robust understanding of the biological conditions on the Project site. Many different biologists have combed the site for many years, and special status species are reported regardless of the specific species being surveyed. This approach leads to many years of incidental evidence of how these species may or may not be using the site. Although incidental data does not replace focused protocol-level species-specific surveys, it provides an additional layer of data that is considered when assessing the site for occupation by special status species. Lastly, although focused surveys for the burrowing owl have been negative, the project assumes presence of this species based on detections immediately adjacent and the high potential for occupation regardless of negative survey results. Mitigation is included to reduce impact to the burrowing owl to less than significant levels. (see pages 2-133 and 2-134 of the Final EIR). It should also be noted that mitigation measures require pre-construction surveys and avoidance and mitigation if detected for all applicable species including silvery legless lizard, coast horned lizard, two-striped garter snake, burrowing owl, Swainson's hawk, golden eagle, American badger, and ring-tailed cat (see pages 3-16 through 3-20 of the Final EIR). As demonstrated, the Project's mitigation fully addresses population dynamics and the potential for changes in the status of special status species impacts at the time of project construction and implementation. The comment provides no evidence that the age of some wildlife surveys cited in the EIR means that the Draft EIR's description of baseline conditions was inaccurate, or that impacts to the particular species surveyed would be substantially more severe than disclosed in the Draft EIR.

Response to Comment ADD-F.2-23:

In an effort to make the plan for implementing grassland preservation and management available immediately, as requested by Draft EIR comments, the requirement for preparation of a separate Grassland Management Plan has been replaced in MM 7-10 by adoption of the Ranchwide Management Plan (RWMP) as the management plan; it has been included in the Final EIR. (See Final EIR, response to Comment B.4-17; Final EIR, Section 3.0, Draft EIR Clarifications and Revisions, page 3-33; Final EIR Appendix 5.7-D.) The RWMP discusses grazing practices and provides specific BMPs for grazing, including residual dry matter targets and weed management, with invasive plant mapping and targeted removal actions. (See Final EIR Appendix 5.7-D, Volume II, Sections 5.1 and 5.2.) The RWMP has been submitted for review and approval to CDFW and USFWS, as applicable. It includes appropriate standards for management of the grasslands that will preserve them in perpetuity. With regard to Appendix B and other appendices to the RWMP, please see response to Comment ADD-F.2-24.

Response to Comment ADD-F.2-24:

The RWMP Volume 2 does refer to an Appendix B, *Grazing Management Recommendations.* The appendix was inadvertently omitted from the Final EIR. The complete RWMP, inclusive of appendices, is attached as Appendix C of this document. Additionally, the entirety of the RWMP, inclusive of Appendix B to Volume 2, is also readily available to the public on the website maintained by the Tejon Ranch Conservancy, located at www.tejonconservancy.org/index_htm_files/Vol.%202_Appx%20B_final.pdf.

The main body of the RWMP Volume 1, which was included in the Final EIR (Appendix 5.7-D), provides the general approach of grazing to be used within the preserved lands on the Tejon Ranch, along with extensive background science guiding the approach, which includes the Centennial Mitigation Preserve (see sub-section *Grazing* under *Management Approaches* section on page 3-31 of Volume 1). In addition, the main body of Volume 2 of the RWMP, also included in the Final EIR (Appendix 5.7-D), includes a series of Conservation Activities and Best Management Practices specific to Antelope Valley grasslands to be implemented within the Mitigation Preserve (Section 3.1.1, Antelope Valley Grasslands, pages 3-2 through 3-7). The various Conservation Activities described include grazing considerations such as Conservation Activity NC-1.1 (page 3-5 of Volume 2), which states that the Conservancy will develop and evaluate standards for residual dry matter (RDM) and vegetation height applicable to grazing management in Antelope Valley grassland. It goes onto to say that these standards will be used to achieve multiple goals, including enhancing native plant species. Based on the results of this work, the Conservancy and TRC will work to implement grazing management trials to evaluate management prescriptions that may enhance pronghorn habitat, native plant species, and other target species.

Response to Comment ADD-F.2-25:

The Commenter's opinion that the RWMP does not provide adequate resource management for native grasslands and wildflower fields is noted, but the lead agency disagrees. The RWMP includes standards for management of the grasslands areas that will preserve the grasslands in perpetuity. The RWMP has been submitted for review and approval to CDFW and USFWS. The RWMP provides a comprehensive framework, within the context of the Ranchwide Agreement, for the effective preservation and management of the preserved open space lands located on Tejon Ranch, including the mitigation lands for the Project site. The Commenter's negative opinion about grazing, and the role of grazing in the RWMP, is also noted. However, the lead agency disagrees. Grazing practices have largely resulted in the conditions that exist currently in the area. (Draft EIR pages 5.7-11, -45, -159) Grazing is anticipated to continue to be a key component of the management of these open space lands, and the value of grazing as a means of protecting plant species has been consistently recognized by federal and State biological protection agencies. For further discussion regarding grazing and open space resource management, see Final EIR, responses to Comments B.4-17 and B.4-60, F.8-10, F.8-131, and F.8-173.

Response to Comment ADD-F.2-26:

It is recognized that areas occupied by annual plant populations fluctuate in detectability due to varying germination between years. With regard to species presence, special status plant surveys were repeated multiple times throughout the Project site impact area between 2003 and 2015, as described on pages 5.7-29 to 5.7-31 in the Special Status Species Surveys section of the Draft EIR. With regard to exact species location, Specific location data gathered during older surveys for the Project cannot represent current conditions with a sufficient level of accuracy and may misrepresent species' true locations. More recent surveys conducted using current methodologies and more sophisticated global positioning tools provide the best current evidence of occupation, and should not be combined with older, less accurate data (i.e. "maximum area of occupancy" approach). The 2015 focused plant survey was conducted using the most current recommended methods of the California Native Plant Society. Accordingly, reference populations in the region were monitored to ensure that the timing of surveys were appropriate. Results of the surveys were consistent with previous years and encompassed previously mapped areas and added a greater level of mapping accuracy due to higher resolution aerial photography availability and use of higher resolution hand held global positions system units. As a result of the increased accuracy, estimated numbers of individuals within occupied areas increased. Using the multiple years of plant survey data coupled with using the most current methods and reference population verification, the areas and numbers of individual special status plants identified as impacted is sufficiently accurate and consistent with scientific land management biological practices. Please also see Final EIR, response to Comment B.4-43 for further discussion of this topic. Please see response to Comment ADD-F.2-27 for further discussion regarding the 2:1 mitigation ratio.

Response to Comment ADD-F.2-27:

The 2:1 mitigation ratio for special status plants was arrived at after considering impacts for each special-status plant individually and is intended to ensure at least an equal or greater population of each species is preserved. Other recent large projects in the region, such as the SR-138 widening and the Tehachapi Renewable Transmission Project, have 2:1 mitigation for rare plants, as is more thoroughly discussed in Final EIR, response to Comment B.4-43. As described in MM 7-1 on page 5.7-173 of the Draft EIR, the Special Status Plant Species Restoration Plan shall include methods for enhancement and restoration such as direct seeding, transplantation, non-native invasive weed control, grazing management, etc. The Plan shall also include appropriate locations for restoration that match the parameters of existing populations. The Special Status Plant Species Restoration Plan and MM 7-1 include specific performance objectives and identifies feasible means of achieving those performance objectives, which is a form of mitigation measure commonly used and has been repeatedly confirmed as legally adequate in CEQA court cases. Please see Final EIR, response to Comment B.4-44, which discusses performance objectives for this mitigation plan. The performance objectives provided are those necessary to ensure impacts to special status plant species are properly mitigated for, and functions and values of these communities are preserved and managed in perpetuity.

A further redesign of the Project with regard to the preservation of special status plants is unwarranted. The Project design has been modified substantially to reduce impacts on special status plants through multiple years of consultation with the Significant Ecological Area Technical Advisory Committee (SEATAC). The Project was redesigned to be consistent with and avoid all SEA designated areas. Furthermore, in response to comments submitted by CDFW, much more grassland was preserved, and plant mitigation measures were modified to require more preservation. These efforts have reduced the Project's impacts on special status plants considerably by avoiding a greater percentage of impacted populations along the southern boundary and avoiding some species entirely. (Final EIR, response to Comment B.4-75; see also Appendix 5.7-B, which represents an earlier proposed Project footprint with greater impacts on special-status plants which was submitted to the County as part of the SEATAC process.)

Response to Comment ADD-F.2-28:

An EIR is intended to be an informational document that is understandable to non-expert members of the public as well as decision-makers. The appendices to the EIR include much more detailed technical studies prepared by subject-area experts. Page 5.7-3 of the Draft EIR refers to multiple EIR biological resources appendices which include expanded discussions, detailed methodologies, and the biological surveys conducted within the Project site and off-site areas (see Appendix 5.7-B of the Draft EIR). The Mitigation Preserve Review is presented in Appendix 5.7-C of the Draft EIR. The Mitigation Preserve Review outlines the methods and resources used to determine the viability of the mitigation lands to support many of the mitigation target resources, such as special status plants. Draft EIR Appendix 5.7-C, page C-11 includes a subsection titled Spatial Analysis of Rare Plant Habitat Parameters, which describes the analysis of soils, slope, and aspect comparing the impacted sites to the mitigation lands. Results of the analysis support the conclusion that potentially suitable habitat exists within the Mitigation Preserve to support a 2:1 mitigation ratio. The document goes on to detail the results of a reconnaissance survey within high suitability match areas in some of the mitigation lands which identified presence of many populations of the target rare plant species. In addition, MM 7-1 (page 5.7-174 of the Draft EIR) requires that a focused survey for special status plants within the Mitigation Preserve be conducted prior to Project impacts on special status plant species. The Final EIR rare plant mitigation evaluation provides sufficient data to support the approach of conservation of rare plant populations within identified potentially suitable habitat in the Mitigation Preserve.

As described above, the Draft EIR presents sufficient data indicating the presence of existing special status plant populations and suitable habitat within the Mitigation Preserve. In addition, as described in the Final EIR, page 2-796, the MM 7-1 includes the following requirements: (7) for creation or enhancement area(s), monitoring to confirm successful implementation of the 2:1 mitigation ratio; (8) contingency measures to further create or enhance plantings in creation or enhancement areas where monitoring results do not show successful 2:1 mitigation, which shall remain in effect until such time as the 2:1 mitigation ratio has been achieved. As a result, the special status plant mitigation measure, inclusive of the 2:1 ratio, is expected to quantifiably demonstrate full mitigation by species to less than

significant levels. Please also see response to Comment ADD-F.2-27 for further discussion regarding the 2:1 mitigation ratio.

Response to Comment ADD-F.2-29:

The grassland community, as a whole, on the Project site, is being treated as special status, and the appropriate mitigation is provided in the EIR, with appropriate management under the RWMP. Rather than splitting up the grasslands into sensitive and non-sensitive sections, the Project is treating the grasslands as a whole, with the functions and values being mitigated for by the preservation and enhancement of grassland areas nearby that are composed of the same mosaic distribution of non-native and native dominated communities. As shown on revised Exhibit 5.7-10, Mitigation Preserve, included in the Final EIR (page 3-116) and page 5.7-135 of the Draft EIR, immediately adjacent lands that represent as close a proximity as feasible are captured within the Mitigation Preserve. Grassland studies of the site and adjacent lands provide data indicating that the highest quality communities occur in the Mitigation Preserve. As described in Appendix 5.7-C of the Draft EIR, a reconnaissance survey of the preserve in 2015, conducted during peak bloom, confirmed this finding. Vast native wildflower fields, larger than any observed on the Project site, were observed within the preserve. The Project's priority will be to preserve these in perpetuity. Enhancement or creation to expand preserved populations within the Mitigation Preserve is *only* necessary if the existing preservation ratio is documented to be less than the minimum 2:1 ratio for any of the six impacted special-status species.

With regard to method of enhancement, the lead agency disagrees with the Commenter's assertion that the RWMP and Project mitigation measures do not provide appropriate detail. The lead agency notes, as is further discussed in responses to Comments ADD-F.2-30 and ADD-F.2-37, that mitigation plans are not required to be circulated with the EIR so long as the mitigation measure identifies the criteria for determining that the impact will be mitigated, and includes specified performance standard and identifies a range of feasible measures that may be implemented to achieve the performance standards and meet mitigation commitments. Such details are appropriately provided in MM 7-1. (Final EIR, Appendix 2.0-C.Rev Mitigation Monitoring and Reporting Program, pages C-27 to C-29) Contrary to the Commenter's assertion, several successful rare plant restoration projects as well as studies which identify preferred methods have been documented, as the lead agency has already thoroughly explained to the Commenter in Final EIR, response to

Comment F.8-128.[3257,3258,3259,3260,3261,3262,3263] Please also see Final EIR, responses to Comments B.4-75, F.8-124, F.8-128, and F.8-173 for further discussion of these topics.

Response to Comment ADD-F.2-30:

Mitigation plans, including the Special Status Plant Species Restoration Plan, are not required to be circulated with the EIR, if the relevant mitigation measure identifies the criteria the lead agency will apply in determining that the impact will be mitigated. This mitigation approach is consistent with CEQA requirements, which permits the formulation of detailed plans at a future date as long as the mitigation measure includes specified performance standards and identifies a range of feasible measures that may be implemented to achieve the performance standard and meet mitigation commitments. Such details are appropriately provided in MM 7-1. (Final EIR, Appendix 2.0-C.Rev Mitigation Monitoring and Reporting Program, pages C-27 to C-29) It is impractical and premature to prepare this mitigation plan at this time because it is site-specific and dependent on the results of other components of the required mitigation measure, including pre-disturbance surveys and further County and resource agency review and approval. Please see also Final EIR, response to Comment F.8-173 for further discussion of this issue.

Response to Comment ADD-F.2-31:

The Final EIR is referencing the multi-year grassland studies that have occurred on the Project site and within the Mitigation Preserve lands. These studies are compiled in Appendix 5.7-B of the Draft EIR. Specific attention should be paid to Plant-3, Plant-5, Plant-6, Plant-7, Plant-8 within Appendix 5.7-B of the Draft EIR. Please refer to the immediately preceding response for more detailed references to the EIR documentation relevant to this comment.

Response to Comment ADD-F.2-32:

The EIR establishes mitigation measures that are fully enforceable against the Project Applicant independent of the existence or funding status of the Tejon Ranch Conservancy. These County mitigation requirements cannot lawfully be modified by the third-party actions of either Tejon Ranchcorp or the Conservancy. Under the TRCRWA, performance of

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3257 Godefroid, et al. 2011. "How successful are plant species reintroductions?" *Biological Conservation* Volume 144. Issue 2 (2011): 672–682.

3258 Shropshire, F.M.; Jones, C.E.; Allen, R.L.; Atallah, Y.C.; Sandquist, D.R.; and Walker, S.E. (Shropshire, et al.). "Significance of Bulb Polarity in Survival of Transplanted Mitigation Bulbs." *Bulletin of the Southern California Academy of Sciences* Vol. 115. Issue 2 (2016).

3259 Haskins, K.E. "Alternative perspectives on reintroduction success." *Animal Conservation*. Issue 1367-9430 (2015): 409-410. Print.

3260 Center for Plant Conservation. 2012. *Plant Reintroduction in a Changing Climate: Promises and Perils*. Edited by J. Maschinski and K.E. Haskins. Washington, D.C.: Island Press.

3261 Kaye, T.N. 2011. Toward Successful Reintroductions: The combined importance of Species Traits, site Quality and restoration Technique (pp. 99-106). Proceedings of the CNPS Conservation Conference, 17–19 Jan 2009.

3262 Stephens, T. 2014 (March 17). Reintroduction experiments give new hope for a plant on the brink of extinction. Santa Cruz, CA: UC Santa Cruz. https://news.ucsc.edu/2014/03/endangered-plant.html.

3263 Dunwiddie, P.W. and R. Adam Martin. "Microsites Matter: Improving the Success of Rare Species Reintroductions." (2016). https://doi.org/10.1371/journal.pone.0150417.

mitigation activities required by public agencies including but not limited to the County is an obligation that must be performed, and the TRCRWA allocates performance responsibilities and creates an in-perpetuity source of funding for the performance of these tasks. For example, the Conservancy has, as its long-term funding source, transfer fees that are collected as homes are sold on all three of the master plan community projects included in the Tejon Ranch Land Use and Conservation Plan, inclusive of Tejon Mountain Village, Grapevine, and Centennial. The transfer fee funding obligation is a recorded covenant that applies to the developed projects, and the collection of these transfer fees is not dependent on any independent management or funding decisions by Tejon Ranchcorp. The TRCRWA is accurately described and referenced in the EIR, but it does not create any legal authority to relieve the applicant of full performance and funding of the mitigation measure obligations included in the EIR.

Response to Comment ADD-F.2-33:

The Mitigation Preserve primarily consists of areas that cannot be developed pursuant to the TRCRWA, which at minimum assures the conservation of all of these lands at all times from the start of the Project buildout period (which is expected to take more than 20 years). The County has not authorized, and is not proposing as part of this Project, to authorize any development within such conserved lands. The Project site also includes more open space than what was prescribed in the TRCRWA, and the conserved lands on the Ranch are already subject to a recorded prohibition on unauthorized activities such as residential and other development. In short, the entirety of the Project mitigation lands are off limits to development if the Project is approved, which creates contiguous open space acres of more than 200,000 acres as well as a funding source to appropriately manage and protect the resource values of these preserved lands. In addition, the Final EIR (page 2-123) states that "the specific location of the acreage to be dedicated within a particular phase will be chosen to maximize the replacement of resource values lost during that phase of construction while maintaining as much contiguous acreage as possible." The more detailed and phased "lock in" of such lands as proposed by Commenter is accordingly not warranted.

Response to Comment ADD-F.2-34:

The comment is correct that the proposed Project is not included in the TUMSHCP, which is designed for species that occur within the "Tehachapi Uplands" (the "TU" portion of the TUMSHCP) in the higher elevations of Tejon Ranch. Neither the Draft EIR nor the Final EIR indicate that the TUMSHCP provides mitigation for proposed Project impacts. Rather, the Draft EIR includes discussion of the TUMSHCP lands to highlight the interconnectedness of lands set aside for protection when coupled with the TRCRWA. Page 5.7-63 of the Draft EIR states that "lands to be conserved as part of the TUMSHCP are adjacent to other lands within Tejon Ranch ownership and are also slated to be protected as part of the TRCRWA. The sum of these interconnected open space commitments, development restrictions, and mitigation measures is a conservation commitment that is, by design, consistent with conservation biology principles calling for large, interconnected blocks of habitat that support the life history requirements of Covered Species and other resident wildlife." The point of the TUMSHCP discussion within the Draft EIR and Final EIR is not to imply that the proposed

Project is a covered activity, but instead to capture the great biological benefit of having large conjoined areas of high quality preserved lands. The EIR's disclosure and discussion of the TRCRWA and TUMSHCP is also relevant to the cumulative analysis, given the permanent preservation of these lands immediately adjacent to the Project site.

Response to Comment ADD-F.2-35:

The Draft EIR (pages 5.7-182 through 5.7-187) address the loss of oak woodlands, permanent and temporal, in several ways. First, the Project disturbance area has been modified since its original design to substantially reduce impacts on oak woodlands, as discussed in the Draft EIR in Section 8.0, Alternatives to the Proposed Project (see page 8-10). Secondly, the Project's mitigation incorporates preservation of oak woodlands exceeding requirements and ensuring the long-term preservation of 3,090 acres of oak woodlands in the region, as noted on page 2-174 of the Final EIR. Lastly, the Project's oak mitigation is designed to meet the requirements of Section 21083.4 of the California Public Resources Code (PRC) (enacted by California Senate Bill (SB) 1334), and the County of Los Angeles Oak Tree Ordinance (CLAOTO) (page 5.7-182 through 5.7-187 of the Draft EIR). As such, the mitigation plan must be approved by the County prior to implementation, and monitoring reports must be submitted to the County annually to ensure mitigation success. While the creation element of the oak mitigation requires the replacement of half the acreage of lost oak woodland resources in the long-term, it does not, and is not required to, specifically eliminate the temporal loss of mature oak woodlands. However, at maturity, the created oak woodlands will replace the lost oak woodland resources.

Page 5.7-183 of the Draft EIR describes the lack of evidence of recruitment within the existing oak woodlands and the projected eventually type conversion to a non-woodland vegetation types as a direct result. As noted above, oak woodland is a slow growing vegetation type and creating a mature oak woodland takes decades. Similarly, it can take many decades without recruitment before mature trees die and are not replaced. However, lack of recruitment is occurring now, and without intensive focused efforts, conversion to non-woodland vegetation types is inevitable. Therefore, oak tree establishment within the existing oak woodland is intended to create the oak woodlands in this area in the future. Furthermore, the methods outlined in MM 7-11 (page 5.7-182 through 5.7-187 of the Draft EIR) demonstrate an approach that minimizes disturbance within the existing oak woodlands and attempts to match existing oak woodland carrying capacity with future mature oak woodland carrying capacity. For example, planting acorns on site and protecting in place substantially reduces risk and disturbance associate with planting larger container plants (page 5.7-183 of the Draft EIR). In addition, the approach ensures a higher rate of success due to the acclimated conditions for growth for young trees thereby minimizing need for irrigation and associated disturbance within the existing oak woodland.

While the RWMP has many goals and implements many methods to preserve existing biological resources within preserved lands, the intensive focused effort to create future oak woodlands in a particular area as quickly as feasible is not an expectation of the RWMP. Rather, the RWMP implements management strategies adaptively to maintain and preserve the existing resources over the long term and over an expansive area. Without any evidence

of the contrary, the existing oak woodlands on the Project site appear to have been preserved in the current condition through implementation of the RWMP. The Project's reliance on the RWMP is intended to ensure the long-term preservation of biological resources within the Mitigation Preserve while implementation of specific resource mitigation plans per various migration measures provide the required enhancement, restorations, and creation to reduce impacts to less than significant levels.

Regarding the final note of the comment that avoidance would be a better strategy, as described above, avoidance has been implemented to the extent feasible (see Draft EIR in Section 8.0, Alternatives to the Proposed Project, page 8-10) and a substantial reduction of oak woodland impacts has been achieved by the reduced Project development area to comply with the Antelope Valley Area Plan provisions allowing for development in the Western Economic Opportunity Area (proposed for Project development), and prioritizing preservation in Significant Ecological Areas (preserved as Project open space).

Response to Comment ADD-F.2-36:

The mitigation approach for wetland waters (i.e. U.S. Army Corps of Engineers ["USACE"] jurisdictional wetlands) is 2:1 in total with one half of the mitigation to be restoration of existing or former wetland waters and the other half to be enhancement of existing or former wetland waters. In response to the first question, yes, it does mean restoration of existing (but may also include former) and it is not limited to on-site but rather any existing or former wetland waters in the Mitigation Preserve lands which are located on and/or off-site. This mitigation approach is intended to mitigate for all "types" of wetlands. However, the use of the term "wetland" in the Final EIR specifically refers to jurisdictional wetlands based on Clean Water Act and the USACE definition. Other types of drainages (i.e. non-wetland jurisdictional waters, or "streams") are mitigated differently as described at the top of page 2-165 of the Final EIR. Furthermore, the Project is not expected to impact any jurisdictional wetlands as described on pages 5.7-162 through 5.7-164 of the Draft EIR.

Regarding the efficacy of the 1:1 preservation:disturbance mitigation ratio, if the Commenter's term "wetlands" refers to the technical definition, it is incorrect because there are no impacts to "wetland" waters from the Project. However, if the Commenter's term "wetlands" refers to the more general use of the term for all waterways or drainages, then it is true. As anticipated to be required by USACE, CDFW, and Regional Water Quality Control Board (RWQCB) regulatory permits, the Project Applicant/Developer shall create, enhance, and/or restore jurisdictional wetlands and jurisdictional riparian vegetated waters to ensure that net habitat values are at least equal to those lost from Project implementation Although there is a general USACE policy of no net loss of wetlands, there are no USACE wetlands impacted by the Project. Lastly, non-wetland USACE regulated waters impacted by the Project are extremely limited and restricted to 0.04 acres, which will be mitigated using the approach described in MM 7-12 on pages 2-163 and 2-164 of the Final EIR.

Response to Comment ADD-F.2-37:

Mitigation plans, including the Streambed and Wetland Habitat Creation and Enhancement Plan, are not required to be circulated with the EIR, if the relevant mitigation measure identifies the criteria the lead agency will apply in determining that the impact will be mitigated. This mitigation approach is consistent with CEQA requirements, which permits the formulation of detailed plans at a future date as long as the mitigation measure includes specified performance standards and identifies a range of feasible measures that may be implemented to achieve the performance standard and meet mitigation commitments. Such details are appropriately provided in MM 7-12. (Final EIR, Appendix 2.0-C.Rev Mitigation Monitoring and Reporting Program, pages C-70 to C-76) It is impractical and premature to prepare this mitigation plan at this time because it is site-specific and dependent on the results of other components of the required mitigation measure, including pre-disturbance surveys and further County and resource agency review and approval. Please see also Final EIR, response to Comment F.8-173 for further discussion of this issue.

Response to Comment ADD-F.2-38:

If creation of habitat were to be implemented within the Mitigation Preserve areas, it would be limited to areas that provide no functional habitat in their existing condition (see Final EIR pages 2-170 and 2-171). As such, there would be no impacts to existing functional values and overall values would be expected only to increase. In addition, all potential habitat creation activities would require approval of the County and most would require State approval through the California Department of Fish and Wildlife as described in MM 7-12 on page 5.7-190 of the Draft EIR. Creation resulting in increased functional value without temporary or permanent impacts would be considered suitable for these areas. Habitat

creation has been documented in multiple documents as an effective approach to successfully replace lost vegetation/habitat.[3264],[3265],[3266],[3267],[3268],[3269],[3270],[3271],[3272],[3273],[3274]

The Commenter provides no data or evidence to support the claim of degradation within the Mitigation Preserve being due to RWMP implementation. Based on the conservation activities listed in the RWMP, it is highly unlikely to be the cause of degradation. The RWMP is more than adequate to meet the goals of maintaining biological resource values at existing levels. Greater levels of management are required for enhancement, restoration and creation efforts, which is why separate mitigation plans are required for these instances as described in the Draft EIR in MMs 7-1, 7-2, 7-11, and 7-12.

Response to Comment ADD-F.2-39:

The comment fails to take in to account the substantial quantity of high-quality lands, 8,973 acres, set aside in the Mitigation Preserve in Los Angeles County. Not only are these lands within Los Angeles County, but 8,913 acres are also lands identified by Los Angeles County as a Significant Ecological Area containing a wide array of importation biological resources. Additionally, the requirement for the proposed Project to mitigate for impacts to biological resources is based on CEQA mitigation requirements, which appropriately focus on biological resource values and not the jurisdictional boundaries of a local jurisdiction – therefore, the location of mitigation lands in Kern County is irrelevant. Further, preservation of large blocks of contiguous open space lands which connect differing habitat types at a landscape level has been widely endorsed by scientific experts, as well as endorsed by the many state and federal agencies that endorsed the TRCRWA for its proactive approach to voluntary advance conservation in anticipation of very limited future development

[3264] Psomas. 2017 (August). Second Annual Monitoring Report, Oak Woodland Habitat Revegetation/Mitigation Program for the Santa Anita Dam Riser Modification and Reservoir Sediment Removal Project. Pasadena, CA: Psomas.

[3265] Lewis. 2016. "Hundreds of Years of Ecology Now: The Santa Anita Oak Woodland Project." *The Environmental Monitor*, Fall 2016, AEP

[3266] Purcell, A.H., Friedrich, C. and R., Vincent H. 2002. *An Assessment of a Small Urban Stream Restoration Project in Northern California*. Restoration Ecology. Volume10, Issue 4, December, Pages 685-694.

[3267] Morrison, **M.**L., Scott, Thomas A., and Tennant, **T**. 1994. **"**Wildlife-Habitat Restoration in an Urban Park in Southern California.**"** *Restoration Ecology* Volume 2**.** Issue 1 **(**March**): p**ages 17-30.

[3268] Kus, Barbara E. 2002. Use of Restored Riparian Habitat by the Endangered Least Bell's Vireo (Vireo bellii pusillus). Restoration Ecology. Volume 6, Issue 1, March 1998, Pages 75-82.

[3269] Rao, Nalini. 2000. Revegetation Methods for Urban Streams: The Use of Salix laevigata and Populus fremontii. www.nature.berkeley.edu.

[3270] Lennox, Michael S. 2007. Native Tree response to Riparian Restoration Techniques in Coastal Northern California. Sonoma State University, http://cesonoma.ucanr.edu/files/27468.pdf.

[3271] Trowbridge, Wendy B., Kalmanovitz, Sara, and Mark W. Schwartz. "Growth of Valley Oak (*Quercus Lobata Nee*) in Four Floodplain Environments in the Central Valley of California." *Plant Ecology* 176.2 (2005): 157 – 164.

[3272] Bernhardt, Elizabeth and Tedmund J. Swiecki. 2014 "Long-Term Performance of Minimum-Input Oak Restoration Plantings." In: Standiford, Richard B.; Purcell, Kathryn L., tech. cords. Proceedings of the seventh California oak symposium: managing oak woodlands in a dynamic world. Gen. Tech. Rep. PSW-GTR-251. Berkeley, CA: U.S. Department of Agriculture, Forest Service, Pacific Southwest Research Station: 397-406.

[3273] Holmes, Katherine A., Veblen, Kari E., Berry, Alison M., and Truman P. Young. "Effects of Prescribed Fires on Young Valley Oak Trees at a Research Restoration Site in the Central Valley of California." *Restoration Ecology* 19.1 (2011): 118 – 125.

[3274] Mahall, B.E., Davis, F.W., and C.M. Tyler. "Santa Barbara County Oak Restoration Program: August 1994 - August 2005". University of California, Santa Barbara, 2005.

activities.[3275,3276,3277,3278,3279,3280] Lastly, the Project site is at the very northern border of Los Angeles County and is immediately adjacent to areas within Kern County in the Mitigation Preserve and have a high degree of similarity in biological resources, which is the highest priority for the County when determining appropriate mitigation lands per CEQA Guidelines.

Response to Comment ADD-F.2-40:

All Project mitigation measures meet CEQA requirements, and Commenter's assertion that mitigation measures with CC&R requirements are neither binding nor enforceable is incorrect. CC&Rs are a binding enforcement mechanism, and violations of said CC&Rs are subject to private enforcement by the master developer and HOA. All mitigation measures which have CC&R requirements (MMs 3-9, 4-2, 7-6, 17-10, 21-6, and 21-7) will also be appropriately monitored and enforced by the County, as specified in the Mitigation Monitoring and Reporting Program, to ensure their requirements continue to be met. (Final EIR Appendix 2.0-C.Rev Mitigation Monitoring and Reporting Program (Revised), pages C-8, C-11, C-12, C-46, C-47, C-143 to C-145, C-155 to C-157).

Response to Comment ADD-F.2-41:

The Commenter falsely asserts that the Final EIR claims the Project would not result in significant growth-inducing impacts. Rather, the Final EIR, and specifically the responses to the Commenter's own comments on the Draft EIR, explicitly acknowledge that the Project would induce growth through substantial increases in population, housing, and employment on the Project site, and that this impact would be significant and unavoidable. (See Final EIR, responses to Comments F.8-46 to F.8-49.)

Growth constraints would limit the ability of the Project to influence growth outside the Project site – these constraints include the 2008 Conservation and Land Use Agreement between Tejon Ranch Company and resource groups that precludes development in approximately 240,000 acres of open space set aside in the agreement, the San Gabriel Mountains and Angles National Forest south of the Project site, the Los Padres National Forest and Hungry Valley State Vehicular Recreation Area to the west of the Project site, legally limited water supply in the Antelope Valley, and related provisions in the County

[3275] Kong, Fanhua, Yin, Haiwei, Nakagoshi, Nobukazu, and Yueguang Zong. "Urban green space network development for biodiversity conservation: Identification based on graph theory and gravity modeling." *Landscape and Urban Planning* 95 (2010): 16 – 27.

[3276] Koomen, Eric, Dekkers, Jasper, and Terry van Dijk. "Open-space preservation in the Netherlands: Planning, practice and prospects." *Land Use Policy* 25 (2008): 361 – 377.

[3277] Parker, Kellie, Head, Lesley, Chisholma, Laurie A., and Nick Feneley. "A conceptual model of ecological connectivity in the Shellharbour Local Government Area, New South Wales, Australia." *Landscape and Urban Planning* 86 (2008): 47 – 59.

[3278] Rudd, Hillary, Vala, Jamie, and Valentin Schaefer. "Importance of backyard habitat in a comprehensive biodiversity conservation strategy: a connectivity analysis of urban green spaces." *Restoration Ecology* 10 (2002): 368 – 375.

[3279] Snep, Robbert P.H., Kooijmans, Jip L., Kwak, Robert G.M., Foppen, Ruud P.B., Parsons, Holly, Awasthy, Monica, Sierdsema, Henk L.K., Marzluff, John M., Fernandez-Juricic, Esteban, de Laet, Jenny, and Yolanda M. van Heezik. "Urban bird conservation: presenting stakeholder-specific arguments for the development of bird-friendly cities." *Urban Ecosystems* 19 (2016): 1535 – 1550.

[3280] Soule, Michael E. "Land Use Planning and Wildlife Maintenance: Guidelines for Conserving Wildlife in an Urban Landscape." *Journal of the American Planning Association* 57.3 (1991): 313 – 323.

General Plan which require focusing new development in designated locations including the West EOA in which the Project site is located. As a result of the above constraints, the Draft EIR identifies the limited locations near the Project site where the only foreseeable induced growth could occur – these include areas west of the Project site from Quail Lake along SR-138 to the I-5 and northward along the eastern side to Gorman, areas east of the Project site along the SR-138 corridor and inside the West EOA, and areas east of the Project site that are outside of the West EOA near Neenach and toward the cities of Lancaster and Palmdale. (Draft EIR pages 6-6 to 6-8).

Taking all of the above into account, the Draft EIR and Final EIR do conservatively and explicitly conclude that the existence of the Project makes it reasonably foreseeable that additional development proposals, which could result in a significant impact on the environment, would be made outside the Project site, which is considered a significant, adverse, indirect growth-inducing impact. (See Draft EIR, page 6-9; Final EIR, response to Comment F.8-49.)

There are no Kaiser Permanente facilities currently proposed to be located on the Project site and the Caltran's Northwest SR-138 Corridor Improvement Project EIR is in error to the extent it states otherwise. However, hospitals and medical centers are a permitted use within the Centennial Specific Plan's Institutional land use designation and, if constructed, would contribute to the Project's significant and unavoidable growth inducing impacts discussed above and disclosed in the EIR.

Response to Comment ADD-F.2-42:

The EIR does not assert that the Project would not lead to growth in the surrounding area. Rather, the Draft EIR notes that Project infrastructure and services would be sized to accommodate the Project population only, and as such would not *directly* lead to growth in surrounding areas. (Draft EIR, pages 6-7 and 6-8) No new electrical production plants or natural gas facilities are part of the proposed Project, and renewable energy generated onsite would be used only by the Project; The Project would not generate extra potable water that could be used to support additional development, and the Project's wastewater reclamation facilities would only treat Project-related water; Internal Project roads would not be sized to support regional traffic flows and would not provide access to other areas outside of Project boundaries; The Project will add fire and police stations, libraries, and schools to support the anticipated population associated with the Project, but these service facilities will be scaled to serve the Project only. (*Ibid.*) The Draft EIR conclusion that sizing infrastructure to serve only the Project would not lead to a direct, growth-inducing impact is consistent with CEQA requirements, as is discussed more fully in Final EIR, response to Comment F.8-52.

However, the Draft EIR also recognizes the possibility that future nearby landowners could propose to connect to or build upon the Project's infrastructure to serve future development and could recognize the benefits of Project services and propose further services and development. (*Ibid.*) The Draft EIR discusses these possibilities for indirect impacts in an appropriate amount of detail, and further discussion would be unduly speculative because they are uncertain events, are not part of the Project, and are outside of the Project

Applicant's control. Further, the potential for these impacts to occur is limited by the growth constraints near the Project site, as discussed above in response to Comment ADD-F.2-41, and as noted in the Draft EIR, such proposals would be subject to environmental analysis under CEQA and a discretionary approval process by the lead agency. For further discussion, please see Final EIR, response to Comments F.8-48, F.8-49, and F.8-52.

Response to Comment ADD-F.2-43:

The EIR does indicate that AVAP and General Plan policies focusing new development in designated locations including the West EOA contribute to growth constraints near the Project site, which somewhat limit the Project's ability to influence growth around the site. (Draft EIR, pages 6-7 to 6-8; Final EIR, responses to Comments F.8-47, F.8-49) However, this EIR is not like the situation in *Stanislaus Audubon Society, Inc. v. County of Stanislaus* (1995) 33 Cal.App.4th 144, 152-157, wherein the lead agency prepared a negative declaration despite evidence in the record of potentially significant growth-inducing impacts, and argued that growth inducement would not occur because of Williamson Act contracting and zoning around the site. Rather, a detailed EIR has been prepared for the Project, and it does not avoid the appropriate study of potential indirect growth inducement, but rather evaluates potential impacts with an appropriate level of detail. (See Final EIR, response to Comment F.8-47 regarding the appropriate depth of analysis) The EIR also explicitly evaluates and acknowledges the possibility that future nearby landowners could propose to connect to or build upon the Project's infrastructure to serve future development and could recognize the benefits of Project services and propose further services and development. (Draft EIR, pages 6-6 to 6-8) Taking this into account, the EIR concludes that the existence of the Project makes it reasonably foreseeable that additional development proposals, which could result in a significant impact on the environment, would be made outside the West EOA, which is considered a significant, adverse, indirect growth-inducing impact. (Draft EIR, page 6-9; Final EIR, response to Comment F.8-49)

Response to Comment ADD-F.2-44:

Despite this comment's claim to the contrary, the Lahontan Regional Water Quality Control Board (Board) comment letter on the Draft EIR did not make any conclusion about the long-term impacts to, or sustainability of, project and other groundwater use in the Antelope Valley. Rather, in Comment D.3-2, the Board requested that the Project EIR "[c]larify how the Project water supply will be sustained in the long-term considering the cumulative groundwater demand from all current and projected future development activities." The information requested by the Board is provided in response to Comment D.3-2 and includes a thorough discussion of the project and other groundwater use in accordance with the Antelope Valley Basin Adjudication Judgment and Physical Solution entered by the Superior Court in December 2015. Regarding long-term sustainability, response to Comment D.3-2 also discusses the possibility that the amount of groundwater allocated to Antelope Valley Basin users, including the project, under the Adjudication Judgment and Physical Solution may be adjusted by the court-appointed watermaster in the future to ensure long-term sustainability. As discussed in response to Comment D.3-2, MM 18-2 requires the preparation of periodic water supply and demand reports by the Project Water Purveyor. If

water use is exceeding projected levels, the Project Water Purveyor must identify specific response measures to ensure that water supplies will meet future demand. Potential sources of additional supply, if necessary, are discussed on pages 5.18-68 to 5.18-71 of the Draft EIR. MM 18-2 specifically requires that no additional development will occur until sufficient supplies are identified. Final EIR response to Comment D.3-2 also summarizes other Project water supplies, and provides substantial evidence that the Project, with mitigation, will not cause significant impacts to water supplies. In spring 2018 the California Department of Water Resources (DWR) released the final 2017 State Water Project (SWP) Delivery Capability Report (DWR 2018). The normal or average, single-dry and multiple-dry year SWP delivery rates in the 2017 report are all higher than the more conservative normal or average, single dry and multiple dry year SWP delivery rates used in the analysis of Project water supplies, including the rates referenced in response to Comment D.3-2.

Response to Comment ADD-F.2-45:

This comment references a portion of response to Comment F.8-221, which was included as one of several responses to comments submitted by the Commenter in comment letter "F.8." Response to Comment F.8-221 specifically addressed the Commenter's inaccurate assertion that water supplies characterized in comment letter F.8 as "Nickel water" would be used by the Project. Response to Comment F.8-221 explains in detail that because no Nickel water will be used by the Project, no analysis of potential impacts related to the potential use of Nickel water is required. Comment F.8-221 does not address any specific with the potential environmental impacts of the water supplies that will be used to meet Project demand. The Commenter previously provided comments on the analysis of the Project's water supplies, including environmental impacts, in Comments F.8-212 to F.8-226. The Final EIR provides comprehensive and thorough responses to all of these comments (see Final EIR pages 2-1142 to 2-1200). The responses demonstrate that the Final EIR analysis of water supplies takes account of all applicable impacts, and that the Project will implement significant, enforceable water conservation, monitoring and adaptive management mitigation measures to ensure that projected water supplies and demand levels are being achieved before additional construction can occur. Please also see response to Comment ADD-F.2-44, as well as response to Comment F.8-212, which address the Commenter's incorrect assertion in Comment F.8-212 that the analysis of Project water supplies "fails to consider all potential significant impacts."

Also, the comment fails to provide any evidence to support the assertion that allocation of water to the Project will mean that water will not be available for other purposes or that the EIR fails to account for the environmental effects of the Project's water usage. On the contrary, Draft EIR Section 5.18, Water Resources, pages 5.18-40 through 5.18-75, demonstrates that, with mitigation, the Project would have sufficient reliable water supplies available to serve the Project's demands, considering existing and projected water demands from other land uses. See, also, Draft EIR Appendix 5.18-A, Centennial Specific Plan Water Supply Assessment, pages 1-14 through 1-16. However, as disclosed in Draft EIR Section 7.13.19, cumulative regional water demand could exceed existing and planned supplies under post-2035 conditions, assuming buildout of the AVAP and Los Angeles County General Plan and the Project's contribution to this cumulative impact would be significant and

unavoidable. Draft EIR Section 5.18 also discloses the biological and hydrological impacts to the Sacramento River Delta associated with the water supply transfers and imports, as well as socioeconomic impacts associated with the transfer of water from agricultural to urban use, and describes the state and federal environmental review process associated with various regulatory programs designed to address such impacts, including, but not limited to, the Water Quality Control Plan for the San Francisco/Sacramento – San Joaquin Delta, the Delta Plan, the Delta Levees Investment Strategy, the Antelope Valley Integrated Regional Water Management Plan, and the pending Bay Delta Conservation Plan and Cal WaterFix projects (see Draft EIR pages 5.18-20 through 5.18-20, 5.18-36 through 5.18-37).

See also, California Department of Water Resources/U.S. Bureau of Reclamation, December 2016, Final Environmental Impact Report/Environmental Impact Statement for the Bay Delta Conservation Plan/California WaterFix (SCH# 2008032062); California Department of Water Resources/U.S. Bureau of Reclamation, January 2017, Addendum to the Final Environmental Impact Report/Environmental Impact Statement for the Bay Delta Conservation Plan/California WaterFix (SCH# 2008032062); California Department of Water Resources/U.S. Bureau of Reclamation, June 2018, Administrative Draft Supplemental Environmental Impact Report/Environmental Impact Statement for the Bay Delta Conservation Plan/California Water Fix (SCH# 2008023062); CALFED, July 200, Final Programmatic Environmental Impact Statement/Environmental Impact Report for the CALFED Bay-Delta Program (SCH# 96032083).

Response to Comment ADD-F.2-46:

This comment misrepresents the California State Legislative Analyst's Office's 2017 report *California's High Housing Costs: Causes and Consequences* (the "Report") to support its inaccurate claim that North Los Angeles County is not a coastal community for purposes of the Report simply because the Project site is not located on the coast. As an initial matter, the Report never defines the terms "coastal communities," much less defines that term as "land beyond the 25 mile radius of California coastal metros," as this comment inaccurately claims. In fact, this comment's purported definition of "coastal communities" misstates a section of the Report explaining that the lack of available land is an existing constraint on new home construction. The Report text cited in this comment actually states that "[l]and in the *center* of California's major metros (defined as land within a 25 mile radius of the city hall of the metro's largest city) contains housing built at densities similar to metros in the rest of the country. By comparison, land in the *outlying areas* of California coastal metros (land beyond the 25 mile radius) has housing at about twice the density as outlying areas in metros elsewhere in the country" (Report at 19, emphasis added). And while the Report does not define the term "coastal communities" at all, it does define the term "metros." As stated on page 7, the Report, it "use[s] the U.S. census definitions of metropolitan areas – or metros. Census metros *are comprised of counties* – or, in some cases, a single county – that share similar socio-economic characteristics and surround a common urban corps." (Report at 7, emphasis added.) Indeed, the Report expressly states that, between 1980 and 2010, "most of California's coastal *counties* needed to build three times as much (or more) housing as they did" and that "insufficient housing was built in California's coastal *counties*, causing demand to spill over into inland areas." (Report at 21-22, emphasis added). Indeed, Figure 8 of the

Report clearly shows that, more than any other county in the state, Los Angeles County's housing need was orders of magnitude greater than the number of new homes built in the County between 1980 and 2010 (Report at 22). Finally, to the extent that the Report expresses a preference that most new housing in Los Angeles County be constructed in the urban core, and that less new housing be built outside of the urban core, such preference is embodied in the regional planning policies that inform the "balanced land use plan" described in SCAG's Regional Traffic Plan/Sustainable Communities Strategy (RTP/SCS). As explained in response to Comment F.8-20, the Project is consistent with, and would implement, the RTP/SCS and its balanced land use plan.

Response to Comment ADD-F.2-47:

This comment is noted and will be provided to County decision makers for their consideration. The County disagrees with this comment's assertion that the Project is sprawl development that will do nothing to alleviate the County's housing shortage. This comment does not raise specific concerns regarding the adequacy of the EIR and thus no further response is required. Please also see response to Comment F.8-20 for further discussion of this issue.

Response to Comment ADD-F.2-48:

The Final EIR analyzes a reasonable range of Project alternatives in full compliance with CEQA and adequately explains the infeasibility of Alternatives A, B, C and E. Moreover, contrary to this comment, the EIR did consider an alternative with a significantly reduced project footprint, i.e., Alternative E, which would reduce by 656 acres the Project's development footprint by relocating proposed development from west portions of the Project site to the portion of the Project site east of the California Aqueduct (see Draft EIR pages 8-52 through 8-60). To the extent that this comment suggests that CEQA requires the EIR to consider a smaller reduced density alternative, commenter is mistaken for the reasons discussed in Final EIR response to Comment F.8-72. Moreover, per CEQA Guidelines § 15126.6(c), the EIR may exclude and need not consider any alternative that would not substantially reduce the Project's significant impacts. A reduced density alternative to the Project – for example, an alternative constructed on the same reduced development footprint assumed by Alternative E, but which would also reduce the Project's residential units and non-residential square footage by 25 percent (the "Reduced Density Alternative") – would not substantially reduce any of the Project's significantly environmental effects identified in the EIR, and thus need not be included in the EIR, as discussed below:

Land Resources - Agricultural: The Reduced Density Alternative would not substantially reduce the Project's significant impacts to agricultural land resources because the same farmlands would be converted to urban uses. As with the Project, direct and cumulative impacts related to the conversion of farmland would be significant and unavoidable under this alternative.

Population, Housing, and Employment: Although the Reduced Density Alternative would have fewer residential units and less non-residential development than the Project, this

alternative would not substantially reduce the Project's significant population impacts because it would substantially increase population and housing on the Project site relative to existing conditions, similar to the Project. Likewise, this alternative would not substantially reduce the Project's growth-inducing impacts because it is reasonably foreseeable that this alternative would induce additional development proposals seeking AVAP amendments made outside of the West Economic Opportunity Area, similar to the proposed Project. As with this Project, impacts related to population, housing, and employment would be significant and unavoidable.

Traffic, Access, and Circulation: Although the Reduced Density Alternative would have fewer residential units and less non-residential development than the Project, this alternative would not substantially reduce the Project's significant traffic impacts. This alternative would somewhat reduce the number of off-site vehicle trips, as compared to the Project, but it would nevertheless increase the volume of traffic on the central and western intersections with SR-138 as compared to existing conditions. As with the Project, the payment of fair-share fees for needed improvements to Caltrans facilities would be made as mitigation, and this impact would be less than significant if such improvements are timely constructed. However, the needed improvements at impacted access points on SR-138 are within Caltrans' control, not the County. If such improvements are not constructed by Caltrans, this alternative's direct and cumulative impacts to the impacted SR-138 facilities would be significant and unavoidable, like the Project.

Air Resources: Although implementation of the Reduced Density Alternative would involve less grading on the site compared to the Project, this alternative would not substantially reduce the Project's significant air resources impacts related to construction activities because the SCAQMD thresholds are based on daily construction emissions, and this alternative would implement the same daily construction activities as the proposed Project. Therefore, as with the proposed Project, this alternative would result in direct and cumulative significant and unavoidable construction-related emissions associated with CO, VOCs, NOx, PM10 and PM2.5. Likewise, this alternative would not substantially reduce the Project's operational air resource impacts as long-term operational emissions of CO, VOCs, NOx, PM10 and PM2.5 would result in significant impacts. Mitigation measures would be implemented to reduce emissions, but the impacts would remain significant and unavoidable.

Biological Resources: Although the Reduced Density Alternative would disturb approximately 656 acres less than the proposed Project, it would not substantially reduce the Project's significant cumulative impacts related to native grasslands and wildlife movement. Like the Project, this alternative's cumulative impact on native grasslands would be significant and unavoidable due to the cumulative loss of native grasslands in the larger region and the State as a whole, and due to the lack of a widely adopted definition of "native grassland" or a published standard for a mitigation ratio. Also, like the Project, this alternative conservatively considered to potentially result in a significant cumulative impact on regional wildlife movement due to the potentially heightened sensitivity of movement though the region for some species and the greater potential for a project or set of projects to substantially interfere with a wildlife corridor under cumulative conditions.

Noise: Although the Reduced Density Alternative would have fewer residential units and less non-residential development than the Project, this alternative would not substantially reduce the Project's significant noise impacts. This alternative would somewhat reduce the number of off-site vehicle trips, as compared to the Project, but it would nevertheless increase the ambient noise environment adjacent to SR-138 between Gorman Post Road and Old Ridge Route Road in excess of the applicable noise criterion at identified noise receptors. Feasible mitigation measures that could reduce this impact to less than significant levels involve alterations to private property and/or within Caltrans' right-of-way, but these areas not in the County's or Project Applicant's control and the County lacks jurisdiction to require the implementation of such mitigation. Accordingly, this direct and cumulative impact would be significant and unavoidable for both the Project and the Reduced Density Alternative.

Visual Resources: The Reduced Density Alternative would not substantially reduce the Project's significant impacts to visual resources. Both the proposed Project and this alternative, would result in significant and unavoidable impacts with respect to alterations to a scenic vista, the degradation of the visual quality of the Project site, and the creation of light and glare due to the size and intensity of development that would occur in a largely undeveloped area.

Other Public Services – Solid Waste: Although the solid waste demands of the Reduced Density Alternative would be reduced as compared to the Project, this alternative's direct and cumulative impacts related to the demand for landfill capacity would, like the Project, be significant and unavoidable because permitted landfill capacity at existing County landfills cannot be guaranteed at the time of buildout and through its operational life, which would occur beyond the required 15-year LACDPW planning horizon.

Climate Change: The Reduced Density Alternative would have few residential units, less non-residential development, and few vehicle trips than the proposed Project and would thus result in reduced greenhouse gas (GHG) emissions as compared to the proposed Project and, like the Project, would satisfy many of the CEQA "pathways to compliance" identified by *Newhall* court and described on pages 5.21-11 through 5.21-13 of the EIR. Like the Project, the Reduced Density Alternative would not conflict with an applicable plan, policy or regulations adopted for the purpose of reducing GHG emissions and, like the Project, this alternative would comply with applicable regulatory programs designed to reduce GHG emissions and that contribute to achievement of the State's GHG reduction goals. However, the County has no jurisdictional control or responsibility for GHG reductions in other parts of California (and certainly not in the context of global action), which all contribute to climate change. In addition, the County does not have jurisdiction to enforce statewide implementation of all of the applicable GHG-reducing regulatory programs with which this alternative (and the proposed Project) must comply. Although many other agencies with the necessary jurisdiction are currently taking action to reduce GHG emissions, the County cannot assure that these measures would ultimately be implemented or sufficient to address climate change. In light of these considerations, as well as the global nature of climate change, this alternative's incremental contribution to the global GHG inventory would be considered cumulatively considerable and this cumulative impact would be significant and unavoidable, similar to the proposed Project.

Water Resources: Like the proposed Project, the Reduced Density Alternative's water supplies would sustainably meet buildout potable and recycled water demands and maintain an average annual reserve supply of at least 79,000 acre-feet after buildout has been achieved. Thus, this alternative's direct impacts to water supplies would be less than significant with mitigation, like the proposed Project. However, as determined during the AVAP and General Plan update CEQA review process, assuming buildout of the AVAP and General Plan within the Antelope Valley, regional water demands could exceed existing and planned supplies under post-2035 conditions. Like the Project, this alternative would result in a increment of regional growth that incorporates state of the art water use and conservation measures that would reduce per capita demand below existing levels. Nevertheless, this increment of regional growth and its associated water demand would be cumulatively considerable and, like the proposed Project, would contribute to cumulative regional water supply impacts identified in the AVAP and General Plan EIRs, which is a significant and unavoidable impact. Thus, this alternative would not substantially reduce the Project's significant and unavoidable cumulative impact on regional water supplies.

This comment reasserts many of the same comments raised in the Commenter's letter identified as letter "F.8" in the Final EIR. Please see responses to Comments F.5-11 and F.8-65 through F.8-78 in the Final EIR for further discussion of this issue.

Response to Comment ADD-F.2-49:

Contrary to this comment, the Final EIR does, in fact, evaluate an alternative that would maintain contiguous habitat linkage from the north to SR-138 and open space to the south and determined that it would not office significant environmental advantages with respect to the Project's impact on wildlife movement corridors at the cumulative level for the reasons explained in response to Comment F.5-13. This comment reasserts many of the same comments raised in the Commenter's letter identified as letter "F.8" in the Final EIR and which are addressed in responses to Comments F.5-11 and F.8-65 through F.8-78 in the Final EIR. Please also see response to Comment ADD-F.3-48.

Response to Comment ADD-F.2-50:

This comment summarizes many of the same comments raised in the Commenter's letter identified as letter "F.8" in the Final EIR, as well as certain comments included in the letter identified as "B.4" in the Final EIR. The lead agency disagrees with this comment's assertion that such comments were not adequately addressed. Indeed, the Final EIR contains thorough and lengthy responses that explain why such comments are without merit, as set forth in responses to Comments B.4-64 through B.4-70, F.7-1, and F.8-227 through F.8-241, for example. With regard to this comment's reference to certain CDFW comments regarding uses allowed on Project open space land, the Specific Plan was extensively revised to add four open space subdesignations (and new mitigation measure MM 7-23 was added to the EIR) to ensure that the scope of permitted uses within Project open space areas is appropriately restricted, as discussed at length in response to Comment B.4-64. This comment's claim that Final EIR only makes "minor changes to the EIR" to address the CDFW's concerns is thus without merit.

Response to Comment ADD-F.2-51:

This comment is noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration. Please also see response to Comment ADD-F.2-50, which also addresses this comment.

Response to Comment ADD-F.2-52:

This comment acknowledges that the Final EIR includes "hundreds of pages" of "lengthy responses" to various comments received on the Draft EIR regarding Project impacts related to greenhouse gas (GHG) emissions. This comment also acknowledges that the Commenter is "still reviewing" these responses, but nevertheless claims that the responses are inadequate without providing any specific examples to support this claim. The lead agency disagrees with the Commenter's assertion that the Final EIR revisions did not adequately respond to all Draft EIR comments concerning Project GHG emissions but acknowledges the Commenter's statement that it will provide more comprehensive comments concerning GHG emissions once it completes its review of the Final EIR. The Commenter's on-going concern regarding Project GHG emissions is noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration. Please see Draft EIR responses to Comments F.8-79 through F.8-96, which address the Commenter's GHG-related comments on the Draft EIR.

Response to Comment ADD-F.2-53:

This comment's stated opposition to the Project is noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration. This comment does not raise specific concerns regarding the adequacy of the EIR and therefore no further response is required.

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Three Points-Liebre Mountain Town Council
P O Box 76
Lake Hughes, CA 93532
3pointsliebremountain@Gmail.com

5 June 2018

SENT VIA EMAIL

Mr. Jodie Sackett
Los Angeles County
Department of Regional Planning
Hall of Records, 13th Floor, Room 1348
320 West Temple Street
Los Angeles, CA 90012
jsackett@planning.lacounty.gov
213.974.6443

Dear Mr. Sackett,

Subject: Project Number 02-232; Centennial Signage

I traveled Northwest Highway 138 recently, and would like to point out some difficulties I have detected with the signage associated with the Centennial Project Hearing. This evaluation is made with the realization changes have been made with regard to the hearing date and an additional remote hearing location. Given that the hearing date was ultimately changed to June 6th, it also appears the additional time between March 21st, April 24th, and June 6th would allow the project proponent to provide updated, easily legible information on the signs for those passing on Northwestern Highway 138.

Generally speaking, Sign 1 is suitably placed for ease in viewing from the roadway, and has available space for parking safely. However, there is no new information posted beyond April 25th on 8.5 x 11 sheets of paper taped to the original signs, which only appears on Sign 1 (mile marker 7.50), and is impossible to read from the highway. This supports the impression the hearing date of March 21st, also painted on Signs 2 and 3, has passed, and might not draw interest from drivers or residents driving through the area. No large printed paper signs show any other revised hearing date, or even the final June 6th date or additional hearing location posted on any of the signs. This might easily be construed as obfuscation, and perhaps a violation of Regional Planning signage requirements, or even CEQA statutes regarding public notices, especially regarding environmental impact review of such a large project. (Photographs provided below for all signs.) (All signs have "Development" misspelled.)

Sign 2, placed near mile marker 6.0, on the north side of the road, oddly, faces eastbound traffic. In order for individuals traveling eastbound to see or read the sign, they must park on the south side of the road and cross the highway, or drive across the highway and park illegally facing traffic, or make a U-turn and park facing west with traffic flow. This makes it difficult, and possibly dangerous, for eastbound traffic to see or access the sign. This Sign 2 and the 8.5 x 11 paper notice show only the March 21st hearing date.

Sign 3, on the north side of Hwy. 138, placed near mile marker 2.0, faces west. This part of the highway consists of a divided four-lane road; it is impossible for eastbound drivers to read the sign across four lanes; and should eastbound drivers seek to read the sign placed east of Gorman Post Road, they will have

ADD-F.3-1

passed the only place to safely turn on to the Post Road. Otherwise, interested persons must park on the south shoulder of the highway, exit their vehicles, and cross four lanes of traffic. Westbound drivers see the back of the sign. I traveled westbound on Hwy 138, knew to look for the sign, could only see the plywood colored back, (since it faces west) parked on the north shoulder, exited my car, and walked along the road-right-of way to get close enough to read the sign. For drivers looking east near Gorman Post Road/Hwy 138 intersection, the sign is illegible and partially obscured by brush. Drivers must then hike a trail at the dead end of the Post Road.

I admit a lack of expertise in the design and placement of signs with regard to Regional Planning requirements, or those of the California Environmental Quality Act. I can, however, assess the difficulties I experienced in safely accessing or even being able to read two out of the three signs from Highway 138 or Gorman Post Road. In addition, and significantly, there are no signs for eastbound traffic on the south side of Highway 138 in the area proposed for 10 million square feet of industrial/commercial space, east of Old Ridge Route Road. Documentation was made Sunday April 8th, and reconnaissance of the signs on June 2nd indicate no changes to the signs to inform the public as to the revised hearings of April 24th, on June 6th, or the remote hearing location in Lancaster at City Council Chambers.

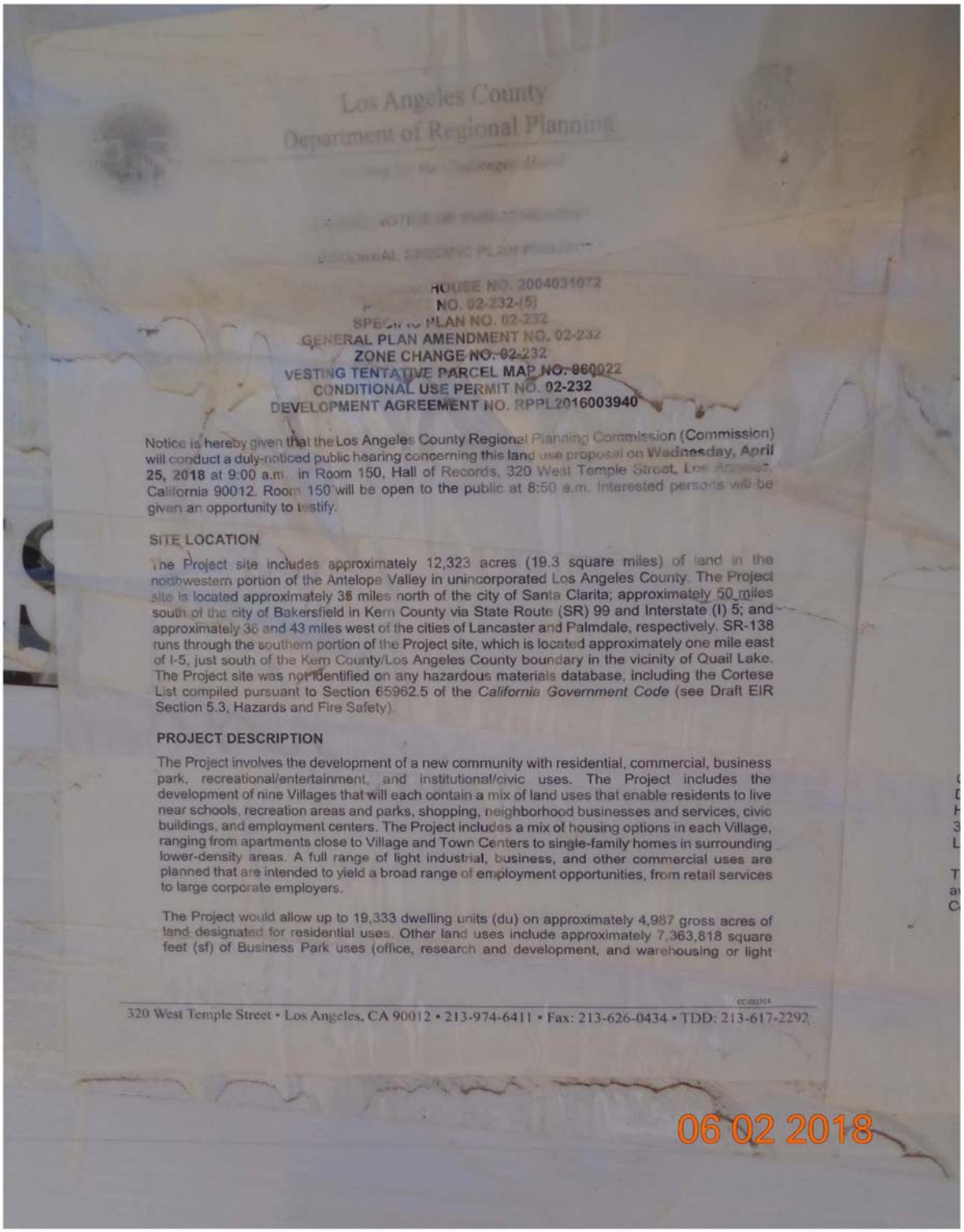
ADD-F.3-1 cont.

Sincerely,

Susan Zahnter

Susan Zahnter
Vice President

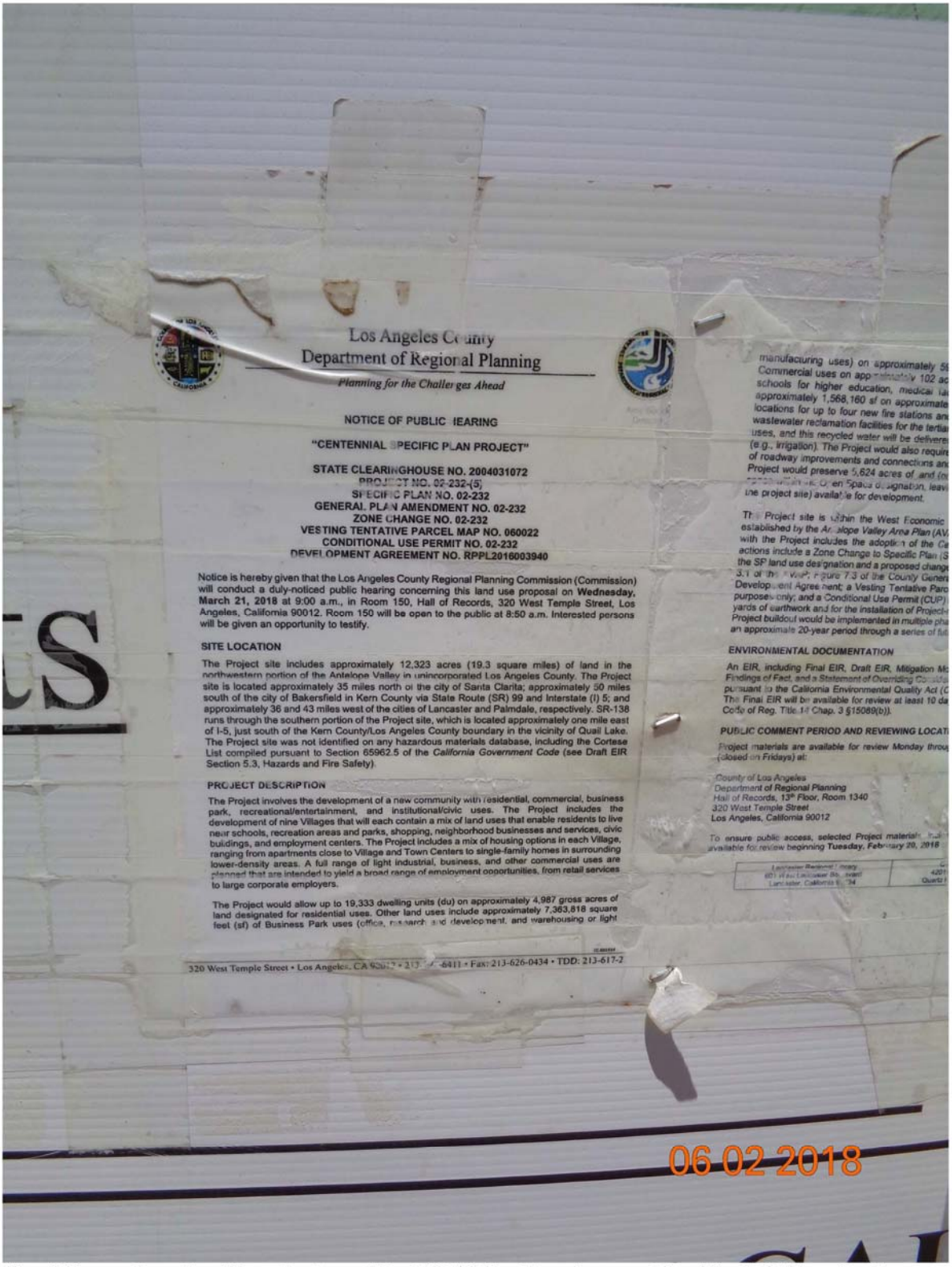
SIGN 1, LOOKING WEST, NORTH SIDE OF HWY 138, 2 June 2018, MM7.5



SIGN 1, The only sign with 25 April 2018 revised hearing date on 8.5x11 paper notice. NO JUNE 6TH hearing date paper notice, sign still reads March 21st hearing date.

Sign 2, North of 138, looking west, positioned for eastbound traffic (?), June 2nd, 2018, MM 6.0

Sign 2, facing eastbound traffic, on north side of highway 138. Drivers must cross the hwy on foot to read.

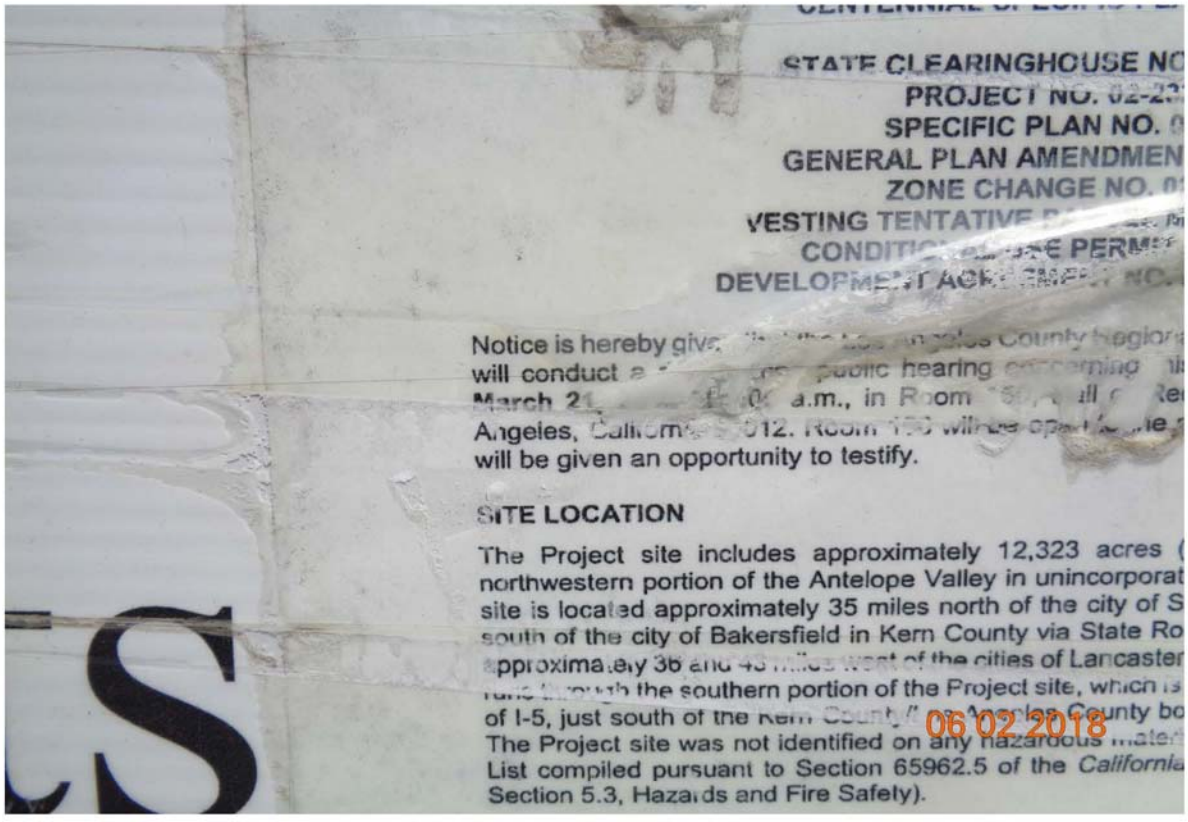


Sign 2 for east bound traffic, only shows March 21st 8.5 x 11 notice, matching March 21st hearing date on left corner of sign. NO April 21st or JUNE 6TH HEARING notice, or remote hearing location.

Sign 3, facing west for eastbound 138 traffic and Gorman Post Road, just east of Gorman Post Road. MM 2.0.

Difficult access to Sign 3, looking east, from dead end of Gorman Post Road. MM. 2.0. Also, eastbound drivers would need to cross four lanes of Hwy. 138 if they passed Gorman Post Road access turn, Which is well east of the sign. Below, looking NE from eastbound 138 and approximately 1/8 mile east of Gorman Post Road access. No U-turns or turn around until Quail Lake.

Sign 3, facing west, vicinity of Gorman Post Road, 8.5x11 meeting date, March 21st hearing notice only; no revised hearing dates noticed on the sign or paper. NO JUNE 6TH HEARING noticed on sign or 8.5x11.



Response to Comment Letter ADD-F.3
Three Points-Liebre Mountain Town Council
June 5, 2018

Response to Comment ADD-F.3-1:

Thank you for your comment and for your participation in this public process. All required public notices regarding the Project have been provided in accordance with applicable legal requirements. Nevertheless, this comment's concerns regarding signage placed at and near the Project site regarding Project hearing date are noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration.

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Association of Rural Town Councils
C/O Three Points-Liebre Mountain Town Council
P. O. Box 76
Lake Hughes, CA 93532
ourartc@gmail.com

5 June 2018

SENT VIA EMAIL

Mr. Jodie Sackett
Los Angeles County
Department of Regional Planning
Hall of Records, 13th Floor, Room 1348
320 West Temple Street
Los Angeles, CA 90012
jsackett@planning.lacounty.gov
213.974.6443

Dear Mr. Sackett,

Subject: Project Number 02-232; Centennial Project, Final Environmental Impact Review

The Association of Rural Town Councils (ARTC) recently voted to provide comments on the Project and its Final Environmental Impact Review (FEIR). At this point in time, we are inclined to oppose the Project based on several factors. There are numerous "unavoidable significant impacts" with regard to air quality, traffic, biological resources, special hazards, water quality, emergency services, public health, and further impacts to several town council communities facing direct and indirect impacts resulting from this Project as well as cumulative impacts from proposed major infrastructure projects. ADD-F.4-1

We find ten days an inadequate amount of time to review the FEIR, evaluate its mitigations, determine their adequacy, and form an appropriate response. The ARTC requested additional time for reading and evaluating, (ARTC Letter dated 25 March 2018); however, no additional time was allotted for review, and we were informed ten days were allowed by law. Because the ARTC meets monthly, and most town councils meet monthly, it takes a minimum of forty-five to sixty days to be sure their input is considered in decisions the ARTC makes, and in order to gather properly thought out information and decide a course of action. We ask that you consider our request for extended time to evaluate the FEIR, but please bear in mind we reserve our decision until we have made adequate review. Please also remember, the ARTC is comprised of councils whose members volunteer their time, many of whom hold full time jobs and devote many hours to representing their communities. The 2,200 page FEIR document, should anyone choose to read carefully, would require reading 220 pages per day over the 10 day review period, not counting any effort at formulating written comments. ADD-F.4-2

Be apprised the Oso Town Council has excluded itself from the ARTC efforts described in this letter. In fact, their charter indicates their desire to be autonomous and separate from the ARTC. ADD-F.4-3

Sincerely,

Susan Zahnter

Susan Zahnter
Director

CC: Fifth District Senior Field Deputy Donna Termeer

Response to Comment Letter ADD-F.4
Association of Rural Town Councils
June 5, 2018

Response to Comment ADD-F.4-1:

Thank you for your comment and for your participation in this public process. This comment's general opposition to the Project is noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration. This comment does not raise specific concerns regarding the adequacy of the EIR and therefore no further response is required.

Response to Comment ADD-F.4-2:

Regarding this comment's request for additional time to review the Final EIR it is noted that the Regional Planning Commission hearing on the Project has been continued from June 6, 2018 to July 11, 2018, thus allowing additional time for public review of the Final EIR documentation.

Response to Comment ADD-F.4-3:

This comment's clarification regarding the Oso Town Council's relationship to the Association of Rural Town Councils is noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration.

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SOUTHERN CALIFORNIA LEADERSHIP COUNCIL

444 South Flower Street, 37th Floor
Los Angeles, CA 90071
P: 213.622.4300
F: 213.622.7100

Co-Chairs:
Governor Gray Davis (Ret.)
Steve PonTell

Vice-Chairs:
Maureen Stapleton
Todd Stevens

SCLC Board:
Governor Pete Wilson
William Ahmanson
Greg Bielli
Lou Anne Bynum
Randa Coniglio
LaDonna DiCamillo
Brant Fish
David Fleming
Gene Hale
John Hawkins
Hasan Ikhrata
Jeffrey Jennison
Jessie Knight, Jr.
Hon. Stephen Larson
Randall Lewis
Wesley Lujan
Greg McWilliams
Julie Miller-Phipps
Ronald O. Nichols
Chet Pipkin
George Pla
Thomas Priselac
Randy Record
Ed Roski, Jr.
Gust Soteropulos
Robert Sprowls
Trey Thornton
Patricia Wagner
Phillip Washington
Tim Ward
Steve Williams
David Wolf
Robert Wolf

Executive Staff:
Mike Roos
President

Richard Lambros
Managing Director

June 5, 2018

Mr. Jodie Sackett
Los Angeles County Department of Regional Planning
320 West Temple Street
Los Angeles, CA 90012

RE: CENTENNIAL AT TEJON RANCH – SUPPORT

Dear Mr. Sackett:

It's no secret that the County of Los Angeles is in a housing crisis. In fact, housing affordability is one of the top concerns of our organization, the Southern California Leadership Council (SCLC), because of its impact to our region's economy and quality of life.

In case you are not familiar with SCLC, it is a non-partisan, non-profit, business-led public policy partnership that exerts strong leadership on issues of regional significance, providing a common voice on major public policies critical to economic vitality, job growth and quality of life in Southern California. SCLC is comprised of three dozen presidents and CEO's of top Southern California companies and agencies and SCLC is privileged to be led in its work by two of California's former governors (Governor Gray Davis and Governor Pete Wilson).

SCLC is concerned that Los Angeles County has some of the highest housing costs in the nation. Currently, only 28% of households are now able to afford a median-priced home in Los Angeles County, and this number will continue to shrink if we don't alleviate our housing shortage. With over 19,000 residential units being developed, Centennial is a step in the right direction for the County of Los Angeles to lessen our region's housing crisis.

In addition, according to LA County's Affordable Housing Action Plan, we have a shortage of 551,807 affordable homes. Even though the County doesn't yet have an official plan for affordable housing, Centennial has made a commitment to providing 10% of our units as Affordable Housing. That's 1,900 affordable homes. When you put Centennial into perspective, Centennial becomes an important part of LA County's affordable housing solution.

ADD-F.5-1

What's more, Centennial is able to provide affordable housing while also preserving one of the largest and most biological diverse areas in California through a historical conservation agreement. Ten years ago, Tejon Ranch reached an agreement with five environmental resource organizations (NRDC, Audubon California, Sierra Club, Endangered Habitats League and Planning Conservation League) to announce a ranch wide agreement, which resulted in the permanent conservation of up to 90%, 240,000 acres, of the Ranch's land. This also led to the creation of the Tejon Ranch Conservancy.

Tejon Ranch has always put an emphasis on the protection of open spaces and has taken significant steps to ensure protection of the biodiversity of the surrounding area. The extensive amount of open space that the Centennial project will provide is consistent with the Los Angeles County Antelope Valley Area Plan (AVAP) and the LA County General Plan. It implements the AVAP by creating an environmentally and economically sustainable master-planned community. Centennial will maximize efficient utilization of regional infrastructure while preserving thousands of acres of contiguous natural open space and biological resources.

SCLC believes that the Centennial project is doing it right ... providing both needed housing and environmental benefits. Because of this, we would like to encourage the Regional Planning Commission to approve the Centennial project. The time has come to move forward with this much-needed development.

ADD-F.5-1 cont.

Sincerely,

Mike Roos
President

Response to Comment Letter ADD-F.5
Southern California Leadership Council
June 5, 2018

Response to Comment ADD-F.5-1:

Thank you for your comment and for your participation in this public process. The Commenter's statement of support for the Project is noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration. This comment does not raise specific concerns regarding the adequacy of the EIR and therefore no further response is required.

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June 7, 2018

Advocates for the Environment

A non-profit public-interest law firm
and environmental advocacy organization

Ms. Jodie Sackett
County of Los Angeles Department of Regional Planning
320 West Temple Street, Room 1348
Los Angeles, CA 90012

Via U.S. Mail and email to JSackett@planning.lacounty.gov

re: Centennial Project, Project Number 02-232

Dear Ms. Sackett:

I write on behalf of Advocates for the Environment, a non-profit public-interest law firm and environmental advocacy organization. Our mission involves protecting the environment, with a specific focus on Los Angeles County.

We oppose the Centennial Project because it will have a variety of significant, avoidable environmental impacts, including destruction of a large area of native California grasslands. The project is pure urban sprawl, and the County should deny its entitlements and support, instead, infill projects that don't add to sprawl in Los Angeles County.

ADD-F.6-1

Sincerely,

Dean Wallraff

Dean Wallraff, Attorney at Law
Executive Director

P.O. Box 4242, Sunland, CA 91041 (818) 353-4268 info@aenv.org

Response to Comment Letter ADD-F.6
Advocates for the Environment
June 5, 2018

Response to Comment ADD-F.6-1:

Thank you for your comment and for your participation in this public process. The Commenter's statement of opposition to the Project is noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration. This comment does not raise specific concerns regarding the adequacy of the EIR and therefore no further response is required.

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G. Individuals

CENTENNIAL

at TEJON RANCH

ANTELOPE VALLEY DISTRICT OFFICE
848 W. LANCASTER BLVD., SUITE 101
LANCASTER, CA 93534
TEL (661) 729-6232
FAX (661) 729-1683

VICTOR VALLEY DISTRICT OFFICE
14343 CIVIC DRIVE, FIRST FLOOR
VICTORVILLE, CA 92392
TEL (760) 843-8414
FAX (760) 843-8348

SANTA CLARITA DISTRICT OFFICE
23920 VALENCIA BLVD., SUITE 250
SANTA CLARITA, CA 91355
TEL (661) 286-1471
FAX (661) 286-2543

California State Senate

SENATOR
SCOTT WILK
TWENTY-FIRST SENATE DISTRICT

COMMITTEES
AGRICULTURE
VICE CHAIR
EDUCATION
VICE CHAIR
GOVERNMENTAL ORGANIZATION
VICE CHAIR
BUSINESS, PROFESSIONS & ECONOMIC DEVELOPMENT
VETERANS AFFAIRS
BUDGET SUBCOMMITTEE #4

June 6, 2018

Mr. Jodie Sackett
Los Angeles County Department of Regional Planning
320 West Temple Street
Los Angeles, CA 90012

RE: CENTENNIAL AT TEJON RANCH - SUPPORT

Dear Mr. Sackett:

As the State Senator representing the 21st Senate District, which encompasses the proposed Centennial development, I am pleased to write you to express my full support of the Centennial at Tejon Ranch project.

After more than a decade of planning, the Centennial at Tejon Ranch project is finally nearing fruition with thorough environmental reviews now completed. As you know, Centennial is consistent with the Antelope Valley Area Plan (AVAP), offering a wide array of housing, business park/office space, commercial space, schools, parks, natural open space, and mixed public use facilities.

The community master plan is simply the implementation of the AVAP, a balanced plan of economic opportunity and conservation. Centennial has also been at the table with the Golden State Gateway Coalition in regards to fast tracking the I-5 improvements before this new community has been set.

Furthermore, Tejon Ranch has been proactive in saving water throughout the years to help supply the project and the subsequent community in to the future. Centennial's Green Development program requires reduced potable water and promotes environmental stewardship and sustainability.

ADD-G.1-1

Centennial is LA County's opportunity to take advantage of growth in Kern County through increased tax revenue for the general fund, additional public services to North LA County, and homeownership opportunities for diverse working-class and middle-income families.

It's important to recognize the geographically sound placement of this project in relation to neighboring communities and the ongoing cooperation with those groups to ensure optimal utilization and conservation of shared regional infrastructure and resources. This is a thoroughly planned development with mechanisms in place to promote partnership with the surrounding areas of North Los Angeles and Kern counties and existing population centers nearby will only benefit from the execution of the Centennial Plan.

CAPITOL OFFICE: STATE CAPITOL, ROOM 4090 • SACRAMENTO, CA 95814 • TEL (916) 651-4021 • FAX (916) 651-4921
SENATOR.WILK@SEN.CA.GOV

I urge the Regional Planning Commission to approve and allow Centennial to move forward. We need to finally begin development on this much-needed project.

ADD-G.1-1 (cont'd)

Sincerely,

Scott Wilk
State Senator, 21st Senate District

cc: Hon. Kathryn Barger, Supervisor 5th District

Response to Comment Letter ADD-G.1
Senator Scott Wilk, 21st Senate District
June 6, 2018

Response to Comment ADD-G.1-1:

Thank you for your comment and for your participation in this public process. The Commenter's statement of support for the Project is noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration. This comment does not raise specific concerns regarding the adequacy of the EIR and therefore no further response is required.

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Los Angeles County
Department of Regional Planning
320 West Temple Street
Los Angeles, CA 90012
June 5, 2018

Centennial Project County Project Number: 02-232

The Centennial Project, no matter how many revisions it goes through, is still a suburban sprawl of leapfrog development disguised as a "community".

The real estates' development suffers from a lack of imagination and a true sense of what a real affordable low or very low rental housing or ownership program would be. The apartments, condos, or affordable houses would be at low-level (elevation) and high density living quarters. All other "village" areas would have their different densities, amenities and housing types. It is unclear to me if this is to distinguish them from each other or create a class system by way of privilege or membership for using amenities.

Existing cities and communities have homeless population problems. Is this Project in any way able to prevent more of this or solve the situation, and if so, how?

The Centennial Project is wrong and it is unacceptable to me and to every one of my neighbors and friends who I talk to about it. I oppose it and the glorified FEIR that does everything for more density and development at all costs and does it backwards.

I object to the ten day review and comment period as a project of this size deserves an adequate review to assess the magnitude of final conditions.

ADD-G.2-1

Thank you,

Judith Fuentes
47458 92nd Street West
Antelope Acres, CA 93536

661-723-1882

Response to Comment Letter ADD-G.2
Judith Fuentes
June 5, 2018

Response to Comment ADD-G.2-1:

Thank you for your comment and for your participation in this public process. The Commenter's statement of opposition to the Project is noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration. Regarding this comment's request for additional time to review the Final EIR it is noted that the Regional Planning Commission hearing on the Project has been continued from June 6, 2018 to July 11, 2018, thus allowing additional time for public review of the Final EIR documentation. This comment does not raise specific concerns regarding the adequacy of the EIR and therefore no further response is required.

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Dear Jodie Sackett,

Scientists warn that we're in the middle of a climate crisis. Because transportation is the single largest driver of carbon pollution in California, new development located far from existing cities has disproportionately large climate impacts. Centennial exemplifies poor, outdated land-use planning on an unprecedented scale. This isolated new city would lock in at least 75,000 new vehicle trips per day with an average trip length of over 45 miles.

If you're committed to a sustainable future for L.A., then you need to say no to Centennial.

L.A.'s wildlands are rapidly diminishing. Ninety-nine percent of California's native grasslands are already gone forever, paved over by similar sprawl development. The Centennial project site contains the last, largest and best native grassland and wildflower fields left in California. Rare wildlife such as California condors, bald eagles, kit foxes and pronghorn also will be harmed if Centennial is built.

It's your job to protect our communities and natural resources, not sell them out to developers.

L.A. County should be setting the standard for 21st-century planning by supporting transit-friendly, urban, affordable housing. Centennial is a poster child of 20th-century sprawl development that exacerbates threats to our population through increasing greenhouse gas production and climate change, air pollution and a deteriorating quality of life.

ADD-G.3-1

The proposed site is in "high" and "very high" fire hazard severity zones. And it's directly on top of California's two major earthquake faults. The area was rated by the U.S. Geological Survey as having the highest level of earthquake hazard.

The county and its taxpayers will be on the hook for millions to provide basic public and emergency services to this remote area.

Instead of allowing isolated sprawl development on irreplaceable grasslands in an area at extremely high risk for fires and earthquakes, L.A. should focus on creating safe housing and economic opportunities in or near existing cities.

Please say no to Centennial: It's the wrong vision for L.A.

Sincerely,

Response to Comment Letter ADD-G.3
Form Letter 3
Various Dates

Response to Comment ADD-G.3-1:

A form letter was prepared by an unknown source and was made available to the public for submittal via email. A total of 276 form letters were submitted via email. Of the 276 form letters submitted, 20 were duplicate form letter submissions. Within this form letter, commenters were encouraged to sign with their name and email address, as well as their city, state, and zip code. Based on this information, the geographic breakdown of the form letter commenters is as follows:

1. 1 commenter within the Antelope Valley;
2. 60 commenters outside of the Antelope Valley, but within Los Angeles County;
3. 4 commenters within Kern County;
4. 74 commenters outside of Los Angeles and Kern Counties, but within California; and
5. 111 commenters outside of California;
6. 4 commenters outside of the United States; and
7. 1 commenter with an unrecognized zip code.

The individual form letters can be found in Appendix A-3 of this document. The response to this form letter is as follows.

Thank you for your comment and for your participation in this public process. This comment's stated opposition to the Project is noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration. Please also see responses to Comment A.3-3, A.3-4, A.3-5, A.3-7, B.4-20, B.4-21, B.4-22, B.4-23, F.8-20, F.8-95, F.8-204, F.2-2, F.2-5, F.3-29, F.3A-46, F.8-189, G.31-1, H.21-1, and J.1-6 of the Final EIR. Since this comment does not raise any specific concerns regarding the adequacy of the EIR, no further response is required.

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Name :
Email :
Address :
City :
Zip:

Dear Mr. Sacket:

I'm writing in support of Centennial at Tejon Ranch. The County of Los Angeles is facing a housing crisis and we need a variety of housing types in various locations throughout Los Angeles County. Centennial's master-plan will do just that; create more price-attainable housing and it will help accommodate the planned regional population and economic growth in our county.

As you know, Centennial is consistent with the Antelope Valley Area Plan (AVAP), offering a wide array of housing, business park/office space, commercial, schools, parks, natural open space, cultural, and public uses.

The community masterplan is simply the implementation of the AVAP, a balanced plan of economic opportunity and conservation. Centennial has also been at the table with the Golden State Gateway Coalition in regards to fast tracking the I-5 improvements before this new community has been set.

It is important to define the project location in terms of synergy with the growing populations near the Centennial project. There is great synergy between other Tejon Ranch projects in Kern County, including Grapevine and Tejon Mountain Village, as well as the Antelope Valley and Santa Clarita.

Centennial is LA County's opportunity to take advantage of growth at Tejon Ranch in Kern County by increasing tax revenue for the general fund and providing increased public services to North LA County, but also providing diverse working-class and middle-income families an opportunity for homeownership.

In addition, Centennial includes plans to focus on water conservation through the use of recycled water and several other sustainable sources. The project's Green Development program requires reduced potable water consumption through the use of drought-tolerant plants, low-flow showerheads, faucets, and toilets. The Centennial master plan will also use recycled water for landscape irrigation in residential common areas.

I urge the Regional Planning Commission to approve and allow Centennial to move forward. We need to finally begin development on this much-needed community.

ADD-G.4-1

Response to Comment Letter ADD-G.4
Form Letter 4
Various Dates

Response to Comment ADD-G.4-1:

A form letter was prepared by an unknown source and was made available to the public for submittal via email. A total of 21 form letters were submitted via email. Within this form letter, commenters were encouraged to sign with their name and email address, as well as their physical mailing address. Based on this information, the geographic breakdown of the form letter commenters is as follows:

1. 16 commenters outside of the Antelope Valley, but within Los Angeles County;
2. 1 commenter within Kern County;
3. 3 commenters outside of Los Angeles and Kern Counties, but within California; and
4. 1 commenter outside of California.

The individual form letters can be found in Appendix A-4 of this document. The response to this form letter is as follows.

Thank you for your comment and for your participation in this public process. The Commenter's general support for the Project will be provided to the Regional Planning Commission and Board of Supervisors for their consideration. The Commenter does not provide comments specifically concerning the adequacy of the Draft or Final EIRs and thus no further response is required.

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From: Sidney
To: Jodie Sackett; queny@bos.lacounty.gov; Kathryn@bos.lacounty.gov
Subject: Support Centennial at Tejon Ranch
Date: Thursday, May 24, 2018 9:31:05 AM

Name : Sidney
Last-name: Stone
Email : sstone@chelseainvestco.com
Address : 6339 Paseo Del Lago
City : California
Zip:92602

Dear Mr. Sacket:

LA County needs a solution to housing affordability! Centennial at Tejon Ranch is what LA County needs now more than ever!

The Natural Resources Defense Council (NRDC), Sierra Club, Audubon California, Endangered Habitats League and the Planning and Conservation League have all agreed to save 90% of the highest value and most biological diverse portions of Tejon Ranch.

Now, Centennial at Tejon Ranch will match the value of this unprecedented conservation and become a national model of an environmentally sustainable community for working-class Angelenos. It will power the entire community with its own clean, renewable energy, including achieving all 2016 CALGreen Tier 1 measures, use state-of-the-art water conservation measures, and with over 95 miles of trails and clustered development, it will allow the future of residences to walk and bike to work, schools, and retail services.

Centennial is a net zero electricity and net zero water community that will provide 19,000 new homes, 1,900 affordable units, 23,000 new jobs, $21.5 million in surplus to the County, all while preserving 240,000 acres of the most pristine natural lands in California.

The County of Los Angeles has already identified Centennial as an Economic Opportunity Area and the new community is consistent with the County's General Plan. Further, it is included in the Sustainable Communities Strategy and Regional Transportation Plan for the Southern California Association of Governments.

The solution to our County's housing affordability crisis is here!

Centennial is designed to be a sustainable, self-contained community. It embraces the smart-growth principles that are highly needed in the County of Los Angeles.

We need to approve this project, begin development on this much-needed community and allow for our housing crisis to come to an end.

Thank you

ADD-G.5-1

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This e-mail was sent from a contact form on We Need Housing (https://secure-web.cisco.com/1OVsYZj_tZJTF925CytC5En5g29DGFT2rYmalgMjEnbDnXT-vEqJ2JsFXdISk8MaRu6jkp_1fiykGG52tI7x-qLT-eQmsEILBs_81w46MsQI-fqL44Bh4c3621Wq5DBq1tgfLbVomgKnEQ4DtIl6yXhYdxj2g9YOwU0Z2xBUNimQwPqORUAvfO6ETU8Toj9xFNel5C1XtUo_YulskuJhAqR2SLR3nrhOWEWU68kBRcz48klHM8cq4UNmWvRrpgkBHYip83ao_1-PE-md1f1B2csycmptrDaZE0zPDzsWBdU0Upaufi0lOA1VpKMSCWXZz3TV7Q6bv2d6vKAWsrBCXj6tOalJPoU-h0wj4rlG6k5z23d_xbY-Yro2y77sQV5tjwTvwKy0kON5Z9I1p9AtGth_Oz0UcX50RUaf6Rjck/https%3A%2F%2Fweneedhousing.org)

Response to Comment Letter ADD-G.5
Sidney Stone
May 24, 2018

Response to Comment ADD-G.5-1:

Thank you for your comment and for your participation in this public process. The Commenter's statement of support for the Project is noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration. This comment does not raise specific concerns regarding the adequacy of the EIR and therefore no further response is required.

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From: Christie
To: Jodie Sackett; cgerwig@bos.lacounty.gov; 4thDist@bos.lacounty.gov
Subject: Support Centennial at Tejon Ranch
Date: Thursday, May 24, 2018 12:24:30 PM

Name : Christie
Last-name : Brown
Email : christiedianebrown@gmail.com
Address : 2408 s grand ave
City : California
Zip:90007

Dear Mr. Sacket:

L A County needs a solution to housing affordability! Centennial at Tejon Ranch is what L A County needs now more than ever!

The Natural Resources Defense Council (NRDC), Sierra Club, Audubon California, Endangered Habitats League and the Planning and Conservation League have all agreed to save 90% of the highest value and most biological diverse portions of Tejon Ranch.

Now, Centennial at Tejon Ranch will match the value of this unprecedented conservation and become a national model of an environmentally sustainable community for working-class Angelenos. It will power the entire community with its own clean, renewable energy, including achieving all 2016 CALGreen Tier 1 measures, use state-of-the-art water conservation measures, and with over 95 miles of trails and clustered development, it will allow the future of residences to walk and bike to work, school, and retail services.

Centennial is a net zero electricity and net zero water community that will provide 19,000 new homes, 1,900 affordable units, 23,000 new jobs, $21.5 million in surplus to the County, all while preserving 240,000 acres of the most pristine natural lands in California.

The County of Los Angeles has already identified Centennial as an Economic Opportunity Area and the new community is consistent with the County's General Plan. Further, it is included in the Sustainable Communities Strategy and Regional Transportation Plan for the Southern California Association of Governments.

The solution to our County's housing affordability crisis is here!

Centennial is designed to be a sustainable, self-contained community. It embraces the smart-growth principles that are highly needed in the County of Los Angeles.

We need to approve this project, begin development on this much-needed community and allow for our housing crisis to come to an end.

Thank you.

ADD-G.6-1

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This e-mail was sent from a contact form on We Need Housing (https://secure-web.cisco.com/1Dxgo4vjRmTFTomYjf4QRPC53MirkzWhTWhHCjq9s9JXgEDbs0s2bwV5SmpajvZN0lnZVnQAh3KXQ_11z3bGuG5bDlH1c8ul18WAwXjtGNB6QKRbHJWZnpC5rmThHp0YMMW2zX0YHE_AaCkiHAzSdA54vsC1Wh_93iDrxUEd3DjXkIk6UjLZ1Yb56aFDMdBF0K98rnl8rilKWqPzD-2j1dnIT05Y101eLU50SR910aQuIlhJmfZ52Yor4z7a-F-HmsWDvnkeKyphPW4qXm6goF4HiRZaskCikiEBmnUVHQs S2cCeHnD0TirH6cF8Y6wiEUxTRqQB-Obg4b4hFl2O WEkPh89NDGBC9Q6hRGtUytEM0Hs5gZdpLSSV3Hxnlp2GMilybN0w2aZ5cFwbttps%3A%2F%2Frenewedhousing.org)

Response to Comment Letter ADD-G.6
Christie Brown
May 24, 2018

Response to Comment ADD-G.6-1:

Thank you for your comment and for your participation in this public process. The Commenter's statement of support for the Project is noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration. This comment does not raise specific concerns regarding the adequacy of the EIR and therefore no further response is required.

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From: Mihai Craioveanu
To: Jodie Sackett
Cc: Mihai Craioveanu
Subject: City of Centennial project
Date: Thursday, May 24, 2018 12:32:58 PM

Mr. Jodie Sackett
Los Angeles County
Department of Regional Planning
Hall of Records, 13th
Floor, Room 1348
320 West Temple Street
Los Angeles, CA 90012
JSackett@planning.lacounty.gov
213.974.6443

Dear Mr. Sackett,

As a Los Angeles county land owner about 3 miles from the proposed site of Centennial, I am very much in favor for this project. I am a person who cares for the environment, but also cares for people and their wellfare! Having said that I read with concern some of the emails submitted against this proposal that while well intended miss some realistic, common sense, and logical issues:

1. California is losing almost a million people annually (more people leaving than moving in) due primarily to very expensive housing in southern California (L.A. San Diego area). Centennial will provide affordable housing and new employment opportunity outside the already congested, and heavily populated Los Angeles,
San Diego, and San Francisco areas.
2. Centennial will also be built with many environmental concepts, solar homes, recycling water station, etc. something not available in the congested large and old metro areas of the southern California.
3. Centennial allows much of its land for natural and recreational use within and outside its borders, unlike the old urban concepts of congested and crowded real estate developments in the existing major urban areas.
4. One cannot expect the state of California to be equated for ever with Los Angeles, and San Francisco where most of the new population tends to move to. This is NOT sustainable and it is one of the major reasons behind California's dwindling population year after year as these areas are already

ADD-G.7-1

beyond most people's financial reach and affordability.
4. Some of the concerns I read in protest emails mention fault lines and their potential consequences. Yet they are not protesting building and constant expansion in San Francisco, and Los Angeles. If we are to worry about fault lines, then we should stop building in 40% of the United States since there are many fault lines crisscrossing the country some much bigger and potentially much more dangerous than San Andreas (i.e. New Madrid, and Yellowstone).
5. Much of the unincorporated parts of L.A. county is made up of vast amount of land that does not provide tax revenue needed for California to maintain its front status in the United States, and one of the top six largest economies in the world. The L.A. county and the state need to keep this very much at the forefront of its future strategic planning.
6. Tejon Ranch is one of the largest (if not the largest) privately own ranch and has done a fabulous job keeping its vast majority of land pristine and in its natural state of environmental preservation.

ADD-G.7-1 (cont'd)

Finally, I am a person who believes in moderation, common sense, and logic, as opposed to radical, one-sided, and extreme points of view. After reading, and documenting myself on this issue for the past 12 years I find that Centennial project while not perfect (what is perfect in today's world anyway?) has the potential to benefit everyone from the individual person, to the county, and the state.

Sincerely,

Mihai Craioveanu
Professor of Music
Music Department
Hope College
Phone: 616-395-7657
E-mail: craioveanu@hope.edu

Response to Comment Letter ADD-G.7
Mihai Craioveanu
May 24, 2018

Response to Comment ADD-G.7-1:

Thank you for your comment and for your participation in this public process. The Commenter's statement of support for the Project is noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration. This comment does not raise specific concerns regarding the adequacy of the EIR and therefore no further response is required.

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From: James
To: Jodie Sackett; cperry@bos.lacounty.gov; Kathryn@bos.lacounty.gov
Subject: Support Centennial at Tejon Ranch
Date: Thursday, May 24, 2018 7:53:40 PM

Name : James
Last-name: Tresevant
Email : jamestresevant@gmail.com
Address : 4309 S. Normandie Ave. Los Angeles
City : Alabama
Zip:90037

Dear Mr. Sacket:

LA County needs a solution to housing affordability! Centennial at Tejon Ranch is what LA County needs now more than ever!

The Natural Resources Defense Council (NRDC), Sierra Club, Audubon California, Endangered Habitats League and the Planning and Conservation League have all agreed to save 90% of the highest value and most biological diverse portions of Tejon Ranch.

Now, Centennial at Tejon Ranch will match the value of this unprecedented conservation and become a national model of an environmentally sustainable community for working-class Angelenos. It will power the entire community with its own clean, renewable energy, including achieving all 2016 CALGreen Tier 1 measures, use state-of-the-art water conservation measures, and with over 95 miles of trails and clustered development, it will allow the future of residences to walk and bike to work, schools, and retail services.

Centennial is a net zero electricity and net zero water community that will provide 19,000 new homes, 1,900 affordable units, 23,000 new jobs, $21.5 million in surplus to the County, all while preserving 240,000 acres of the most pristine natural lands in California.

The County of Los Angeles has already identified Centennial as an Economic Opportunity Area and the new community is consistent with the County's General Plan. Further, it is included in the Sustainable Communities Strategy and Regional Transportation Plan for the Southern California Association of Governments.

The solution to our County's housing affordability crisis is here!

Centennial is designed to be a sustainable, self-contained community. It embraces the smart-growth principles that are highly needed in the County of Los Angeles.

We need to approve this project, begin development on this much-needed community and allow for our housing crisis to come to an end.

Thank you.

ADD-G.8-1

--
This e-mail was sent from a contact form on We Need Housing (https://secure-web.cisco.com/1FKf9nZ1H7KviKIqFuxiig-PsnAxF-0xeoLdZ6hms45wdY0ZAWvp8q4vzr5Oty_1qxGllTu1FleyuLAyaFCt3tz1t6Zm8uIz0sLbRmCZh4SFhj08ov9_VuGr4ks2c9dwFXsqxoj_5GZJ7ZpQYsua-3Ozp85MgNhxUSfG49_1Y8jnakBH-vOtmLbGz1tHmtqKEJlUCR-K97dpKX_fs7rYi97vpC7kqhgWQQQ2rFYUEZiXFCdmsh7IRFqIpNEQA-tp5_tNsEtlDxLVpI35vb83M552liYO3Lv1aorbMfDy8S4caRTFdQsa52BnPZr6im9IL_Zk0x6uD8xKAat33aKqTUY-Nd0mHwjgUvFXN4bo3xpehBJbRE09hgC5m2RzoOX1AnqXriCfNJOiEZN4NPmqL1AQ/https%3A%2F%2Fweneedhousing.org)

Response to Comment Letter ADD-G.8
James Tresevant
May 24, 2018

Response to Comment ADD-G.8-1:

Thank you for your comment and for your participation in this public process. The Commenter's statement of opposition to the Project is noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration. This comment does not raise specific concerns regarding the adequacy of the EIR and therefore no further response is required.

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From: DRP LDCC
To: Jodie Sackett; Steven Jones
Subject: FW: Oppose Centennial's development plan for Tejon Ranch
Date: Tuesday, May 29, 2018 3:15:51 PM

FYI

Thank you,

Alice Wong, AICP
Principal Planner
Land Development Coordinating Center Section (front counter)
Department of Regional Planning
320 W. Temple Street, Room 1360
Los Angeles, CA 90012
http://planning.lacounty.gov/

Department Front Counter Hours:
M, Tu, Th 7:30am-5:30pm & W 8:30am-5:30pm
Closed every Friday

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-----Original Message-----
From: Bruce G. BALDWIN [mailto:bbaldwin@berkeley.edu]
Sent: Wednesday, May 23, 2018 7:08 PM
To: DRP LDCC <zoningldcc@planning.lacounty.gov>
Subject: Oppose Centennial's development plan for Tejon Ranch

Dear LA County Planning:
I am writing to urge opposition to Centennial's development proposal for 30,000+ acres of Tejon Ranch. As a professional botanist and specialist on California's native flora, I believe the development plan is too destructive to natural biodiversity to be defensible, even with preservation of the rest of the ranch. The areas to be developed have irreplaceable botanical value, including some of the most spectacular wildflower stands in California, and the scope of development in Centennial's proposal is far too great to be able to effectively mitigate against impacts to surrounding wildlands that are supposed to be protected under current law. Please reject Centennial's development plan.

ADD-G.9-1

Sincerely,
Bruce Baldwin
2408 Parker St.
Berkeley, CA 94704

Response to Comment Letter ADD-G.9
Bruce G. Baldwin
May 29, 2018

Response to Comment ADD-G.9-1:

Thank you for your comment and for your participation in this public process. The Commenter's statement of opposition to the Project is noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration. This comment does not raise specific concerns regarding the adequacy of the EIR and therefore no further response is required.

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From: DRP LDCC
To: Jodie Sackett; Steven Jones
Subject: FW: Please oppose all development in Tejon Ranch
Date: Tuesday, May 29, 2018 3:21:19 PM

Another comment for your case

Thank you,

Alice Wong, AICP
Principal Planner
Land Development Coordinating Center Section (front counter)
Department of Regional Planning
320 W. Temple Street, Room 1360
Los Angeles, CA 90012
http://planning.lacounty.gov/

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-----Original Message-----
From: Dan s [mailto:danucleus02@gmail.com]
Sent: Tuesday, May 29, 2018 2:13 PM
To: DRP LDCC <zoningldcc@planning.lacounty.gov>
Subject: Please oppose all development in Tejon Ranch

We need to save the native grasslands! They are all but gone!

ADD-G.10-1

Response to Comment Letter ADD-G.10
Dan S
May 29, 2018

Response to Comment ADD-G.10-1:

Thank you for your comment and for your participation in this public process. The Commenter's statement of opposition to the Project is noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration. This comment does not raise specific concerns regarding the adequacy of the EIR and therefore no further response is required.

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From: Steven Jones
To: Jodie Sackett
Subject: Fwd: Please STOP all development of Tejon Ranch!!
Date: Wednesday, May 30, 2018 9:48:20 AM

Steven D. Jones, MPA, AICP
Land Divisions Section
Department of Regional Planning
County of Los Angeles
http://planning.lacounty.gov/
Office: (213)974-6433

Begin forwarded message:

From: DRP LDCC <zoningldcc@planning.lacounty.gov>
Date: May 30, 2018 at 07:25:27 PDT
To: Steven Jones <sdjones@planning.lacounty.gov>
Subject: FW: Please STOP all development of Tejon Ranch!!

Regards,

Land Development Coordinating Center Section (DF)
Department of Regional Planning
320 W. Temple Street, Room 1360
Los Angeles, CA 90012
http://planning.lacounty.gov/

General inquiries: 213-974-6411
Hours: M, Tu, Th 7:30am-5:30pm & W 8:30am-5:30pm
Closed every Friday

From: Susan Sundberg <sundberg27@yahoo.com>
Sent: Wednesday, May 30, 2018 6:59 AM
To: DRP LDCC <zoningldcc@planning.lacounty.gov>
Subject: Please STOP all development of Tejon Ranch!!

Please STOP the Centennial development and stop ALL development of Tejon Ranch. It is CRITICAL wildlife habitat for Antelopes, Jack Rabbits, and wildflowers. There are very few antelope left in the US. We used to count 600 or more antelope on our road trips to Minnesota in the 70's. On my trip in 1996 across to MN I saw maybe 5 or 6. They are very threatened!

ADD-G.11-1

Please stop ALL development of this irreplaceable and beautiful habitat and wildlife corridor.

Thank you,

Susan Sundberg

Sent from Yahoo Mail on Android

ADD-G.11-1 cont.

Response to Comment Letter ADD-G.11
Susan Sundberg
May 30, 2018

Response to Comment ADD-G.11-1:

Thank you for your comment and for your participation in this public process. The Commenter's statement of opposition to the Project is noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration. This comment does not raise specific concerns regarding the adequacy of the EIR and therefore no further response is required.

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From: Steven Jones
To: Jodie Sackett
Subject: Fwd: Centennial Specific Plan
Date: Wednesday, May 30, 2018 10:23:14 AM

Steven D. Jones, MPA, AICP
Land Divisions Section
Department of Regional Planning
County of Los Angeles
http://planning.lacounty.gov/
Office: (213)974-6433

Begin forwarded message:

From: DRP LDCC <zoningldcc@planning.lacounty.gov>
Date: May 30, 2018 at 09:58:45 PDT
To: Steven Jones <sdjones@planning.lacounty.gov>
Subject: FW: Centennial Specific Plan

This is for you....

Regards,

Land Development Coordinating Center Section (DF)
Department of Regional Planning
320 W. Temple Street, Room 1360
Los Angeles, CA 90012
http://planning.lacounty.gov/

General inquiries: 213-974-6411
Hours: M, Tu, Th 7:30am-5:30pm & W 8:30am-5:30pm
Closed every Friday

From: Katherine Pakradouni <wildergardens@gmail.com>
Sent: Wednesday, May 30, 2018 9:48 AM
To: DRP LDCC <zoningldcc@planning.lacounty.gov>
Subject: Centennial Specific Plan

Hi,

I am emailing regarding my opposition to the Centennial Specific Plan at Tejon Ranch.

Developing 30,000 acres of this valuable natural space would be a devastating move for a number of reasons. Ecologically-speaking, California would lose even more of its valuable plants and animals, including iconic wildflower displays and rare plants.

ADD-G.12-1

California's natural heritage is so significant to our value as a state, and Tejon Ranch is one of our most diverse and botanically and biologically significant sites. It should be preserved as such, and not disturbed with the inevitably disruptive nature of human activity.

Furthermore, the introduction of housing for thousands will also bring a much higher likelihood of fires to the area. Records show that human activity is most often the cause of our state's horrific fires. The inevitable increase of fires would be costly and taxing to our already overburdened fire departments.

Lastly, I am very concerned about urban sprawl. I feel we have enough urban areas as it is, but that if development is necessary, it should be done in an area where it would create minimal disturbance of California's pristine, natural heritage. Development at Tejon Ranch would be doing the opposite of that. It would be the equivalent of bulldozing the Antelope Valley Poppy Reserve or other botanically significant site to make room for housing. Let us focus development on areas that are already degraded and leave Tejon Ranch alone.

ADD-G.12-1 cont.

Thank you,

Katherine Pakradouni
4416 Gainsborough Ave.
Los Angeles, CA 90027

Response to Comment Letter ADD-G.12
Katherine Pakradouni
May 30, 2018

Response to Comment ADD-G.12-1:

Thank you for your comment and for your participation in this public process. The Commenter's statement of opposition to the Project is noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration. This comment does not raise specific concerns regarding the adequacy of the EIR and therefore no further response is required.

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From: Amy Plesetz
To: Jodie Sackett
Subject: Centennial - not a good plan
Date: Thursday, May 31, 2018 10:34:37 AM

Dear Ms. Jodie Sackett,

The location of the proposed Centennial project is a very bad place to house and additional 55,000+ people.

This is why:

-The commute to Los Angeles will be completely ridiculous for the residents.

-It will jam-up California's main artery (5 freeway) with more horrendous traffic. How far does urban sprawl really have to go?

-In addition to these, Newhall Ranch in Santa Clarita, was approved for their extremely large 5-Village project (over 15,000 Acres). All of these residence will no doubt be using the 5 freeway for their commute. Is it wise to approve another development that will no doubt add to this already existing traffic problem?

-This project will also negatively impact California's natural resources. There are 6 CNPS-ranked plants. These plants are very rare and not found very many other places in the world!

-No fewer than 10 species of oaks are found on the project site! The wildlife that exists within the oak woodlands will be effected by this. Pronghorn antelope can be found in this region of California!

-Biological corridors is something that could help California's wildlife along with any wildlife that migrate out of State. There is undoubtedly a number of benefits to allowing wildlife to cross from one fragmented habitat to another in order to carry on with their existence. The proposed development is within an corridor, a transitional area between ecoregions. If we want to preserve biodiversity, the approving this housing project, is not the way.

Thank you very much for your time and hearing me.

Sincerely,

Amy Plesetz
Nature-lover, commuter, California native and lifer!
(626) 991-4190

ADD-G.13-1

Response to Comment Letter ADD-G.13
Amy Plesetz
May 31, 2018

Response to Comment ADD-G.13-1:

Thank you for your comment and for your participation in this public process. The Commenter's statement of opposition to the Project is noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration. This comment does not raise specific concerns regarding the adequacy of the EIR and therefore no further response is required.

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From: Brien Brennan
To: Jodie Sackett
Subject: Tejon Ranch / Centennial
Date: Thursday, May 31, 2018 1:15:39 PM

Dear Ms.Sackett and the rest of the Regional Planning Commission,

I am writing to voice a perspective on the difficult decision that faces you regarding the Centennial project. But I will be up front that I am also writing to ask that the Regional Planning Commission not recommend the this project for approval. For all the reasons submitted by the California Native Plant Society, Tejon Ranch should be viewed as a sanctuary for life and left to the natural processes of the beings who evolved there.

I trust that you all have the best long-term interest of the greater community in your hearts. I also accept that, to hold the positions you have, you likely operate within a fairly normal societal framework of beliefs. Consciously and subconsciously, we all participate in the way of living created by these beliefs, which at core are rooted in a story of separation, of individual primacy.

With this story as central to "progress," humans have repeated the process of making choices that convert vastly complex communities of life into seemingly more "useful" lands or places for our communities and economies, which are nowadays usually seen as inseparable. Yet we have forgotten what (and who) we are really inseparable from--the real, tangible, living world. One hundred years from now, Earth will be a lot hotter, and the consequences of over-taxing that living world of which we are a part will have caused humans to either create new ways of living or spiral into spiritual and material impoverishment. I think the time to make the transition to living *with* the rest of the world rather than dominating and monetizing it is **now**. If you leave those 12,323 acres of intact biological communities alone, many will still be there in a hundred years, doing all the good they do--carbon sequestration, building soil, improve local water cycles, providing food and habitat to thousands of species (humans included!), cleaning the air, cooling the land. People of that era will be grateful for the for the wisdom of the Commission members who made that tough choice back in 2018.

The world is in the most serious crisis humans have ever encountered, as

ADD-G.14-1

our activities have destroyed so much habitat that a Sixth Mass Extinction of life on Earth has been declared, which 7 of 10 biologists feel is more dangerous to our own survival than is climate change. But when you add climate change to this first crisis, the unprecedented rates of extinction only accelerate. We don't need more cities or shopping malls or retail stores. Or jobs based on creating and maintaining these. We need jobs rooted in repairing the damage we've done to our one and only home. Rather than caving to the economic pressure, I wonder what a solution that addressed the sanctity of life would look like.

My hope for you all is a lively and heartfelt discussion (or many) that digs into that question.

Brien Brennan
Tehama County, CA

ADD-G.14-1 cont.

Response to Comment Letter ADD-G.14
Brien Brennan
May 31, 2018

Response to Comment ADD-G.14-1:

Thank you for your comment and for your participation in this public process. The Commenter's statement of opposition to the Project is noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration. This comment does not raise specific concerns regarding the adequacy of the EIR and therefore no further response is required.

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From: Tish Brown
To: Jodie Sackett
Subject: Response to the Centennial Specific Plans
Date: Thursday, May 31, 2018 10:41:18 PM

I oppose the development of the area under question. Hope it is possible to find other areas for all those houses but think it would be tragic if any more of the Tejon Ranch were destroyed, and especially that the area under question is more important as wildlife corridor and grassland.

ADD-G.15-1

Tish Brown
Bolinas, CA 94924

Response to Comment Letter ADD-G.15
Tish Brown
May 31, 2018

Response to Comment ADD-G.15-1:

Thank you for your comment and for your participation in this public process. The Commenter's statement of opposition to the Project is noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration. This comment does not raise specific concerns regarding the adequacy of the EIR and therefore no further response is required.

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From: Linda Curry
To: Jodie Sackett
Subject: Just say NO to Centennial
Date: Friday, June 01, 2018 1:54:14 PM

For Jodie Sackett to share with Los Angeles County Planning Commission in regards to proposed development for Tejon Ranch.

As native Californian with 7 generations of my family having lived here since before the Gold Rush, I can tell you the 'rush' never ended. It doesn't matter whether you look as far back as Bodie or as recently as Trona to see the effects of boom and bust as California resources are extracted and the lands abandonned to the detriment of local community. Salton Sea hucksters or East Coast money still trying to turn a buck have seriously compromised the natural heritage of this state.

I am old enough to remember the oak savannah that used to run from Mendocino to Mexico. The only new thing about the ghost towns in the desert is the age of the buildings. People commuting ever longer distances to work degrade air quality as well as their own quality of life. Not to mention that settling in areas as arid as the Mojave is just plain crazy. The boom and bust cycle just keeps prospering while the environment takes a beating and average taxpayers get the bill for the cleanup and impacts of rampant development.

It used to be that every California child had access to their natural heritage. These days it's hard to find kids that know anything different than play equipment at a concrete and grass park, much less nature trails through California native flora or an opportunity to spy what's left of our fauna.

Tejon Ranch property due to its geographic intersection and large, continguous parcel presents one of the last remaining native grasslands in California and a wildlife corridor that will probably see even more use after the devastating fires in Los Padres National Forest.

Plans for Centennial are the wrong place, the wrong size, and just plain wrong headed. If housing in LA county is so in demand, build up. Forget about paving the grasslands and allow what little rain that does fall to have a chance to recharge local aquifers. Not to mention the value of the land as a recreational spot for county to have vistas of the state and some small imagination of what it must have looked like to early settlers whether native Americans or imports.

Please reject the Centennial development proposed for Tejon Ranch.
Linda Curry
1015 Bush St.
Santa Rosa, CA 95404

ADD-G.16-1

Response to Comment Letter ADD-G.16
Linda Curry
June 1, 2018

Response to Comment ADD-G.16-1:

Thank you for your comment and for your participation in this public process. The Commenter's statement of opposition to the Project is noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration. This comment does not raise specific concerns regarding the adequacy of the EIR and therefore no further response is required.

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From: elnura maine
To: Jodie Sackett
Subject: #stopcentennial please dont build a city in tejon
Date: Saturday, June 02, 2018 9:35:19 PM

Please do not develop in Tejon Ranch. I am a biologist and understand that the Tejon Ranch area is a very sensitive biome which houses a unique and sensitive ecosystem. Building there will just exacerbate the 200+ species that go extinct everyday.

ADD-G.17-1

Sincerely

Elnura Maine

Response to Comment Letter ADD-G.17
Elnura Maine
June 2, 2018

Response to Comment ADD-G.17-1:

Thank you for your comment and for your participation in this public process. The Commenter's statement of opposition to the Project is noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration. This comment does not raise specific concerns regarding the adequacy of the EIR and therefore no further response is required.

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From: Jacob Lemus
To: Jodie Sackett
Subject: tejon development
Date: Saturday, June 02, 2018 9:54:18 PM

Dear james sackett,

I am Jacob Lemus representing U.S. Fish & Wildlife service fire management, and I am asking you to please stop the proposed new development its a beautiful ecosystem that I have enjoyed almost my entire life. I think there are enough homes in southern california and we need to focus on preserving whats left of California's naturual beauty.

ADD-G.18-1

Sent from Yahoo Mail on Android

Response to Comment Letter ADD-G.18
Jacob Lemus
June 2, 2018

Response to Comment ADD-G.18-1:

Thank you for your comment and for your participation in this public process. The Commenter's statement of opposition to the Project is noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration. This comment does not raise specific concerns regarding the adequacy of the EIR and therefore no further response is required.

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From: Michelle MacKenzie
To: Jodie Sackett
Subject: Opposition to Centennial Development
Date: Sunday, June 03, 2018 12:29:32 PM

Dear Ms. Sackett

I write to submit public comment in opposition to the Tejon Ranch development planned for Centennial. I write as a lifelong resident of California. I grew up in Los Angeles County, hiking through the hills, wondering over the wildflowers, hoping to see wildlife and birds. We are so fortunate to enjoy the biodiversity of California.

As California faces climate change and the need to build closer to jobs and transportation corridors, I cannot fathom why a planned city away from all of these is being considered. Centennial is 60 miles from Los Angeles and 40 miles from Lancaster. Its location would require residents to endure long commutes and generate more greenhouse gas emissions which the state is working to reduce. Moreover, this location is vulnerable to high fire danger and is located on top of the San Andreas Fault -making Centennial risky and expensive to protect in the case of natural disasters. Wildfires, in particular, are more likely as climate change continues to impact our state.

Centennial's proposed site is actually an important habitat - some of the finest native perennial grassland and wildflower habitat that remains in California. 6 rare native plant species of plans and no fewer than 10 native oaks are present on the site. Unfortunately, proposed mitigation measures conflict with the conservation of these important native species.

Further, this site would disrupt important biological corridors. In light of climate change, transitional areas between ecoregions - such as this site - are extremely important to preserve. It is critically important that we preserve these types of areas.

The future home of Centennial is also habitat for California condors and the last place where pronghorn "antelope" still exist in Antelope Valley. As a result, this site is important wildlife habitat for these animals and several other wildlife species. It is an important wildlife corridor that needs to be preserved.

Centennial proposes a mitigation ratio of only 1.8:1 (conserved to developed ratio) for habitats impacted. Sensitive and unique habitats of Tejon Ranch should be mitigated for a much higher rate, at a minimum 3:1.

Finally, I urge you, as a native California, to please preserve this magical place. There are so few places left where California looks like native California. Let's build closer to the cities. Let's reduce greenhouse gas emissions. Let's fight climate change. Let's preserve wildlife corridors and oak woodlands and hills that sprawl with wildflowers and manzanita. We can do betters. We are California, after all. Close the door on this misguided project. Let California condors soar over open fields - not urban sprawl!

Sincerely,
Michelle MacKenzie
Menlo Park, California

ADD-G.19-1

Response to Comment Letter ADD-G.19
Michelle MacKenzie
June 3, 2018

Response to Comment ADD-G.19-1:

Thank you for your comment and for your participation in this public process. The Commenter's statement of opposition to the Project is noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration. This comment does not raise specific concerns regarding the adequacy of the EIR and therefore no further response is required.

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From: Tim Moore
To: Jodie Sackett
Subject: Specific Plan No. 02-232 / Centennial Specific Plan
Date: Sunday, June 03, 2018 2:23:47 PM

Dear Jodie Sackett,

I am writing to urge the LA County Regional Planning Commission to favor sensible and courageously far sighted planning in existing urban areas, not creating whole new towns in the last of California's pristine habitats that will such resources from the urban core. The Centennial project will put thousands of citizens in danger from fires, flooding and earthquakes, and this will strain already cash strapped emergency services. This project will also contaminate the groundwater table with urban runoff from autos and landscaping chemicals. It will disrupt wildlife migration patterns and rend the natural infrastructure even more than it has been until now.

Sprawl type development will eventually run out of room here in this great but not boundless state. We have to make a hard decision at some point, and better we do it now, before the earth warms another degree and we have more urban areas designed around the automobile, that will have to eventually be re-engineered for a sustainable future at a much greater cost in the future. Do we want to cover the last available areas with gas guzzling suburbs or create the best livable cities and preserve the best of California's world famous native landscapes and in the process save the worldwide climate? As a forty five year long resident of Southern California, I have seen enough so called well planned specific plans and no matter how pretty they make them look, in the big regional picture, it all ends up as more of the same, more leapfrog sprawl. Please say no to the Centennial Specific Plan.

ADD-G.20-1

Thank you for your time. Sincerely,

Timothy Moore

Ramona, California 92065

Response to Comment Letter ADD-G.20
Timothy Moore
June 3, 2018

Response to Comment ADD-G.20-1:

Thank you for your comment and for your participation in this public process. The Commenter's statement of opposition to the Project is noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration. This comment does not raise specific concerns regarding the adequacy of the EIR and therefore no further response is required.

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From: Dom ...
To: Jodie Sackett
Subject: Please don"t develop on tejon ranch
Date: Sunday, June 03, 2018 4:32:33 PM

I urge you do not develop on tejon ranch. It is a delicate ecosystem that we as a people can not afford to have the developed on. Too much of our natural, prestigious and more important irreplaceable lands have been overdeveloped and are no longer safe habitats for our ecosystem to thrive.
As a nature enthusiasts I plan on visiting this place many times in my future and implore you to please do not develop on this land. Please preserve this land for posterity and our current generation...

ADD-G.21-1

Sincerely, Dominique Ferguson

Response to Comment Letter ADD-G.21
Dominique Ferguson
June 3, 2018

Response to Comment ADD-G.21-1:

Thank you for your comment and for your participation in this public process. The Commenter's statement of opposition to the Project is noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration. This comment does not raise specific concerns regarding the adequacy of the EIR and therefore no further response is required.

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From: Francisco Villa
To: Jodie Sackett
Subject: Tejon Development
Date: Sunday, June 03, 2018 6:19:48 PM

Dear James Sackett,

The World deserves to see Tejon Ranch as a natural experience. Please consider NOT destroying the beautiful sacred landscape and habitat. Developing on this land

will only pollute the environment and endanger wildlife.

We have been blessed with its majestic landscape to enjoy peacefully and preserved. Turning it into a shopping mall would only devalue and degrade the natural features.

We know you recognize Tejon Ranch for its beauty and hope you value it naturally rather than commercially.

ADD-G.22-1

Response to Comment Letter ADD-G.22
Francisco Villa
June 3, 2018

Response to Comment ADD-G.22-1:

Thank you for your comment and for your participation in this public process. The Commenter's statement of opposition to the Project is noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration. This comment does not raise specific concerns regarding the adequacy of the EIR and therefore no further response is required.

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From: Rosie Beers
To: jsackett@planning.LAcounty
Subject: Centennial
Date: Sunday, June 03, 2018 9:29:17 PM

I am writing to encourage you to set aside all the land for the public, and have no development. Please, please. We need more nature preserved. ADD-G.23-1

Thank you.

May peace be with you,

Rosie

Response to Comment Letter ADD-G.23
Rosie Beers
June 3, 2018

Response to Comment ADD-G.23-1:

Thank you for your comment and for your participation in this public process. The Commenter's statement of opposition to the Project is noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration. This comment does not raise specific concerns regarding the adequacy of the EIR and therefore no further response is required.

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From: Rosie Ruiz
To: Ann Dorsey
Cc: Jodie Sackett; Steven Jones
Subject: RE: Oppose the Centennial Specific Plan
Date: Monday, June 04, 2018 6:07:44 AM
Attachments: image001.png

Your message has been received and will be forward to the Regional Planning Commission, thank you.

From: Ann Dorsey [mailto:aedorsey@hotmail.com]

ROSIE O. RUIZ | Commission Services
Los Angeles County Department of Regional Planning
213.974.6409 | http://planning.lacounty.gov | **rruiz@planning.lacounty.gov**
Department office hours are Monday through Thursday
From 7:00 a.m. to 6:00 p.m. The Department is closed on Fridays

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Sent: Sunday, June 03, 2018 4:27 PM
To: Rosie Ruiz <rruiz@planning.lacounty.gov>
Subject: Oppose the Centennial Specific Plan

Ms. Ruiz,

Please forward the message below to the Los Angeles County Regional Planning Commission members.

Thank you,

Ann Dorsey

Los Angeles County Regional Planning Commission,

I ask that you oppose the Centennial Specific Plan which would create of a new city with

ADD-G.24-1

19,323 residences, approximately 55,000 people and 10.2 million square feet of commercial development, in an unpopulated ecologically unique area of northwest Los Angeles County for the following reasons:

-- The project would be located on top of the San Andreas Fault and subject to high fire danger.

-- It is located far away from other developed areas (40 miles from Lancaster and 60 miles from Los Angeles) which would require long commute times and degrade a large area of wilderness, well beyond the the city's boundaries, to develop the infrastructure (roads, water supply, electricity, etc.) necessary to support the community.

-- It is a site of ecoregional transitions at the junction of the Antelope Valley, Tehachapi Mountains, and the Liebre Mountains where ecological and evolutionary processes of statewide importance take place.

-- It is home to at risk wildlife and plants including California condors, pronghorn "antelopes", 10 oak species, and 6 other plants, is the site of some of the finest native perennial grassland and wildflower habitats that remain in California and is a critical biological corridor necessary for preserving biodiversity.

-- The proposed mitigation ratio of 1.8:1 (conserved to developed ratio) is too low. At a minimum the area should be mitigated at a rate of 3:1 because of the incredible biodiversity of the area. Tejon Ranch is just 0.25 % of California's acreage, but it includes 14% (911 plants) of the state's native flora.

We need to be thoughtful about where future development takes place. Starting a community in an area where residents would be subject to strong earthquakes and frequent wildfires, that is far away from other developed areas (increasing greenhouse gas emissions and exacerbating the effects of climate change) and would destroy habitat critical to maintaining the biodiversity of the state is not a good place to do so. It is just the opposite. Please do what is best for Californians and the future and oppose this project.

ADD-G.24.1 (cont'd)

Sincerely,

Ann Dorsey
Northridge, CA 91325

Response to Comment Letter ADD-G.24
Ann Dorsey
June 4, 2018

Response to Comment ADD-G.24-1:

Thank you for your comment and for your participation in this public process. The Commenter's statement of opposition to the Project is noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration. With regard to the Commenter's note that a 1.8:1 ratio of conserved to developed lands is inappropriate, the Commenter is incorrect about the amount of land conserved. Total open space mitigation land is approximately 27,000 acres, which is an approximate 3:1 open space to developed ratio. See Final EIR, response to Comment F.8-115. This comment does not otherwise raise specific concerns regarding the adequacy of the EIR and therefore no further response is required.

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From: mary shabbott
To: Jodie Sackett
Subject: No to Centennial
Date: Monday, June 04, 2018 7:13:01 AM

Please vote NO to this massive development at Tejon Ranch. What little natural environment left has to be protected. We have enough concrete.
Please vote no.
Thank you,
Mary Shabbott

ADD-G.25-1

Response to Comment Letter ADD-G.25
Mary Shabbott
June 4, 2018

Response to Comment ADD-G.25-1:

Thank you for your comment and for your participation in this public process. The Commenter's statement of opposition to the Project is noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration. This comment does not raise specific concerns regarding the adequacy of the EIR and therefore no further response is required.

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From: Andrew Hemphill
To: Jodie Sackett
Subject: STOP CENTENNIAL
Date: Monday, June 04, 2018 11:48:25 AM

Dear James Sackett,

I am a wildland firefighter with the U.S. Forest Service, and I am writing to you asking that you oppose the development at Tejon Ranch. As a federal employee and "steward of the land", I urge you to think about the impact this would have. It would be devastating to the land, the natural wildlife, and to the people of Southern California.

This development will undoubtedly disturb the precious ecosystems at Tejon Ranch, and will unnecessarily pollute Southern California. We do not need to keep digging up our natural lands to make housing for people.

Let's work on protecting our beautiful and precious lands.

Please, stop this development.

-Andrew Hemphill

ADD-G.26-1

Response to Comment Letter ADD-G.26
Andrew Hemphill
June 4, 2018

Response to Comment ADD-G.26-1:

Thank you for your comment and for your participation in this public process. The Commenter's statement of opposition to the Project is noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration. This comment does not raise specific concerns regarding the adequacy of the EIR and therefore no further response is required.

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From: Kirkland West
To: Jodie Sackett
Subject: Please Reject the Centennial Project
Date: Monday, June 04, 2018 4:08:29 PM

Mr. Jodie Sackett

We would like to announce our full opposition to this project and encourage the Department of Regional Planning to reject this project proposal. The California Floristic Province has been identified as one of the few biological diversity hotspots of the world and it our privilege and duty as residents of California to ensure that we preserve this richness for the trillions of people that will exist on this planet after we are gone.

ADD-G.27-1

Aaron Echols
Alliance President
Habitat Defense Council

Response to Comment Letter ADD-G.27
Aaron Echols
June 4, 2018

Response to Comment ADD-G.27-1:

Thank you for your comment and for your participation in this public process. The Commenter's statement of opposition to the Project is noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration. This comment does not raise specific concerns regarding the adequacy of the EIR and therefore no further response is required.

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From: ddcrumley@everyactioncustom.com
To: Jodie Sackett
Subject: Centennial is Unsustainable for Los Angeles
Date: Monday, June 04, 2018 3:38:07 PM

Dear Jodie Sackett,

In many ways California and Lis Angeles are leading the way toward climate-wise policies. However, the Centennial Project exemplifies poor, outdated land-use planning on an unprecedented scale. This isolated new city would lock in at least 75,000 new vehicle trips per day with an average trip length of over 45 miles.

If you're committed to a sustainable future for L.A., then you need to say no to Centennial.

L.A.'s wildlands are rapidly diminishing. Ninety-nine percent of California's native grasslands are already gone forever, paved over by similar sprawl development. The Centennial project site contains the last, largest and best native grassland and wildflower fields left in California. Rare wildlife such as California condors, bald eagles, kit foxes and pronghorn also will be harmed if Centennial is built.

L.A. County should be setting the standard for 21st-century planning by supporting transit-friendly, urban, affordable housing. Centennial is a poster child of 20th-century sprawl development that exacerbates threats to our population through increasing greenhouse gas production and climate change, air pollution and a deteriorating quality.

Instead of allowing isolated sprawl development on irreplaceable grasslands in an area at extremely high risk for fires and earthquakes, L.A. should focus on creating safe housing and economic opportunities in or near existing cities.

Please say no to Centennial: It's the wrong vision for L.A.

ADD-G.28-1

Sincerely,
Dawn Crumley
Burbank, CA 91505
ddcrumley@sbcglobal.net

Response to Comment Letter ADD-G.28
Dawn Crumley
June 4, 2018

Response to Comment ADD-G.28-1:

Thank you for your comment and for your participation in this public process. The Commenter's statement of opposition to the Project is noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration. This comment does not raise specific concerns regarding the adequacy of the EIR and therefore no further response is required.

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From: Kristine Karnos
To: Jodie Sackett
Subject: Tejon Ranch
Date: Monday, June 04, 2018 7:07:54 PM

Hello

I'm writing to ask that the LA County Regional Planning Commission please reject the Centennial Specific Plan proposal.

Development in LA county should be sited close to where jobs and transportation infrastructure are located. Urban sprawl is a challenge everywhere in California, and siting development here would guarantee long commutes and the pollution and traffic that creates. It's also an area prone to wildfires, so the cost of protecting it (especially as we see high temperatures and intense wildfires on the increase in California) will be high.

In particular, siting this development in Tejon Ranch, which is a local hotspot of biodiversity, seems very shortsighted. The area of Tejon Ranch provides wildlife habitat and corridors, transitional areas between ecoregions - irreplaceable once impacted by development. Build where the impact isn't so great. California is a treasure not only for its climate, but for its natural beauty and open spaces... the area of Tejon Ranch is one that ought to be preserved not just for the enjoyment of people but for the SURVIVAL of the pronghorn and condors and other special status wildlife that make their home there. Limit development in areas of human/wildlife interface - we have fewer of these left.

And besides these concerns, there's a high earthquake risk for any development here. The 7.9 magnitude Tejon Earthquake (with an intensity of perhaps 8.25), which struck on the morning of Jan. 9, 1857 is considered by many to be the largest historic earthquake that California has witnessed (challenging even the 1906 San Francisco quake). Situating a large development in area with a history of major earthquake *and* high fire danger seems disastrous.

Please take a long range view. Please don't recommend the project for approval.

ADD-G.29-1

Thank you for your consideration,
K Karnos
(lifetime Californian, both in southern and northern CA)

Response to Comment Letter ADD-G.29
Kristine Karnos
June 4, 2018

Response to Comment ADD-G.29-1:

Thank you for your comment and for your participation in this public process. The Commenter's statement of opposition to the Project is noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration. This comment does not raise specific concerns regarding the adequacy of the EIR and therefore no further response is required.

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From: martilindsey@everyactioncustom.com
To: Jodie Sackett
Subject: Vote NO on Centennial--Too Many issues
Date: Tuesday, June 05, 2018 8:25:24 AM

Dear Jodie Sackett,

I am writing to express several concerns about the planned Centennial project.

As a resident of the West Antelope Valley, just a few miles from the proposed mega-city, my major concerns are as follows:

1. Water. We are currently experiencing a record drought. Los Angeles County does not have nearly enough water to meet the needs of their current residents. A city the size of Centennial will severely affect our water out here in the Western part of the Mojave Desert.

2. Traffic. I feel that Tejon Ranch needs to address the traffic needs of the proposed population for this end of the valley BEFORE you begin to build. With the 2017mud slides and closure of Highway 58, traffic on Highway 138 has increased dramatically. There are significantly more trucks and autos on this two lane highway. This causes unsafe passing and potential accidents. This is a preview of what is to come if a city the size of Centennial is added to a rural area such as Neenach.

3. Light Pollution. The Western end of the Antelope Valley is one of the few places in Los Angeles County where stars are still visible. We need plans to preserve this.

4. Dust. The few solar facilities in the area have dramatically increased the amount of dust and spores in the air.

5. Wildlife/Open Space. Again, what are your plans to address this? L.A.'s wildlands are rapidly diminishing. Ninety-nine percent of California's native grasslands are already gone forever, paved over by similar sprawl development. The Centennial project site contains the last, largest and best native grassland and wildflower fields left in California. Rare wildlife such as California condors, bald eagles, kit foxes and pronghorn also will be harmed if Centennial is built.

L.A. County should be setting the standard for 21st-century planning by supporting transit-friendly, urban, affordable housing. Centennial is a poster child of 20th-century sprawl development that exacerbates threats to our population through increasing greenhouse gas production and climate change, air pollution and a deteriorating quality of life.

Instead of allowing isolated sprawl development on irreplaceable grasslands in an area at extremely high risk for fires and earthquakes, L.A. should focus on creating safe housing and economic opportunities in or near existing cities.

Please say no to Centennial: It's the wrong vision for L.A.

ADD-G.30-1

Sincerely,
Martha Lindsey
Lancaster, CA 93536
martilindsey@hotmail.com

Response to Comment Letter ADD-G.30
Martha Lindsey
June 5, 2018

Response to Comment ADD-G.30-1:

Thank you for your comment and for your participation in this public process. The Commenter's statement of opposition to the Project is noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration. This comment does not raise specific concerns regarding the adequacy of the EIR and therefore no further response is required.

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From: avcprvc@everyactioncustom.com
To: Jodie Sackett
Subject: Centennial is the Right Vision for North Los Angeles County
Date: Tuesday, June 05, 2018 12:34:23 PM

Dear Jodie Sackett,

If you're committed to a sustainable future for North Los Angeles County, then you need to say YES to Centennial.

The Centennial project site all on Private Property and as such the owners should be allowed to Develop their land for the good of the citizens of California. Wildlife such as California condors, bald eagles, kit foxes and pronghorn will not be harmed if Centennial is built as they have the natural and un-disturbed habitat of the remaining mountain land of the Tejon Ranch.

It's your job to project the future of our communities see that affordable housing is available in the North Los Angeles County, not submit to self serving special interest groups whose only goal is to stop progress and kill California's growing economy.

L.A. County should be setting the standard for 21st-century planning by supporting transit-friendly, Suburb and Rural, affordable housing. Centennial is a poster child of 21st-century Planned Community Development that will deliver to our population affordable housing and new and improved schools and local shopping facilities and improve the quality of life quality of life.

ADD-G.31-1

Los Angeles County should not be dictating to private land owners and developers of private lands within the county and should not be subscribing to the precepts of Agenda 21 and the Wildlands Project.

Instead of isolating citizens of free will to the hazards, crime, and disease of urban sprawl, allow the development of the Centennial Project to proceeded on the already approved parcels of land in the North West part of Los Angeles County. Los Angeles should focus on improving safe housing and economic opportunities in our inner city and urban areas rather than stopping the progress of the Centennial Project for Free Thinking American and California Citizens..

Please say YES to Centennial: It's the Right Vision for sustainable development in Los Angeles County.

Sincerely,
John Martin
Lancaster, CA 93536
avcprvc@amlands.org

Response to Comment Letter ADD-G.31
John Martin
June 5, 2018

Response to Comment ADD-G.31-1:

Thank you for your comment and for your participation in this public process. The Commenter's statement of opposition to the Project is noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration. This comment does not raise specific concerns regarding the adequacy of the EIR and therefore no further response is required.

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From: burenjargal anir
To: Jodie Sackett
Subject: Stop Centennial
Date: Tuesday, June 05, 2018 1:54:07 PM

Dear James Sackett,

I am a resident of Virginia, and I came across the disturbing news regarding a development at Tejon Ranch. As an advocate of the environment and nature, I strongly encourage you to re-think and protect Southern California's precious lands and its wildlife safety.
Please hear our words and protect our mother nature.

ADD-G.32-1

Sincerely,

Anir Burenjargal

Response to Comment Letter ADD-G.32
Anir Burenjargal
June 5, 2018

Response to Comment ADD-G.32-1:

Thank you for your comment and for your participation in this public process. The Commenter's statement of opposition to the Project is noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration. This comment does not raise specific concerns regarding the adequacy of the EIR and therefore no further response is required.

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Jodie Sackett

From: Ksenya Gurshtein <ksenya@gmail.com>
Sent: Tuesday, June 05, 2018 2:58 PM
To: Jodie Sackett
Subject: Concern about the Centennial Specific Plan

Dear Ms. Sackett,
I am an LA (city and county) resident and voter, and I'm writing to you to express my concern about the Centennial Specific Plan for development ahead of a vote on it tomorrow. I am keenly aware of the housing shortage in Southern California, and I think that environmental concerns should be balanced with the need for affordable housing, but based on information I've been able to find on the Centennial Specific Plan, I do NOT think that such developments are the answer. Rather than encouraging housing density and connectedness through public transit, this development will take important wildlife habitat and turn it into more sprawl, traffic, and ergo pollution. As I said, I support development as a need, but urge the planning commission to reject this particular development because of the environmental degradation it would bring, the pressure it would put on existing infrastructure, and the wrong message it would send about the future of California's development.
Sincerely,
Ksenya Gurshtein

ADD-G.33-1

--
Ksenya Gurshtein

"Art is what makes life more interesting than art."
--- Robert Filliou

"What is true for writing and for a love relationship is true also for life. The game is worthwhile insofar as we don't know what will be the end."
--- Michel Foucault

Response to Comment Letter ADD-G.33
Ksenya Gurshtein
June 5, 2018

Response to Comment ADD-G.33-1:

Thank you for your comment and for your participation in this public process. The Commenter's statement of opposition to the Project is noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration. This comment does not raise specific concerns regarding the adequacy of the EIR and therefore no further response is required.

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Jodie Sackett

From: Carolyn Longstreth <cklongstreth@gmail.com>
Sent: Wednesday, June 06, 2018 8:39 AM
To: Jodie Sackett
Subject: Opposing Centennial approval

Hello Ms. Sackett:
As a former officer of the statewide California Native Plant Society, I'm writing to urge the Planning Commission to reject the Centennial project.

The Antelope Valley is part of a critical eco region for California's Native flora— indeed, it produces one of the most spectacular wildflower displays in the entire world.

Los Angeles County needs to recognize this and act to prevent its destruction by rejecting this ill-conceived development. The project proponent should be instructed to significantly scale back the plan, protect the listed species, preserve migration corridors and greatly increase the ratio of lands to be set aside as mitigation vs acreage to be developed.

ADD-G.34-1

Such action would be more consistent with principles of sustainable development which must guide our responses to increasing population and climate change.

Thank you for the opportunity to comment.

— Carolyn Longstreth
Inverness CA
--
Carolyn Longstreth
PO Box 657
10 Balmoral Way
Inverness CA 94937
415-669-7514

Response to Comment Letter ADD-G.34
Carolyn Longstreth
June 6, 2018

Response to Comment ADD-G.34-1:

Thank you for your comment and for your participation in this public process. The Commenter's statement of opposition to the Project is noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration. This comment does not raise specific concerns regarding the adequacy of the EIR and therefore no further response is required.

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Jodie Sackett

From: George A Paulikas <george.a.paulikas@aero.org>
Sent: Wednesday, June 06, 2018 5:40 PM
To: Jodie Sackett
Subject: Centennial Project

Dear Los Angeles County Planning Commission-
Please do not approve the Centennial Project. Our home in Bear Valley Springs/Tehachapi would border on this project if it is brought to completion We value our quiet rural environment as do the bears, elk, bobcats ,condors and mountain lions who are our neighbors. Our oaks and pines cherish the smog-free environment. Our brilliant starry skies do not need the glow of neon, sodium and mercury lamps.
Enough!

ADD-G.35-1

George and Joan Paulikas
301380 Starland Drive
Tehachapi, 93561 CA

Response to Comment Letter ADD-G.35
George and Joan Paulikas
June 6, 2018

Response to Comment ADD-G.35-1:

Thank you for your comment and for your participation in this public process. The Commenter's statement of opposition to the Project is noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration. This comment does not raise specific concerns regarding the adequacy of the EIR and therefore no further response is required.

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Jodie Sackett

From: Steven Jones
Sent: Thursday, June 07, 2018 4:38 PM
To: Jodie Sackett
Subject: Fwd: Centennial Development

Sent from my iPhone

Begin forwarded message:

From: DRP LDCC <zoningldcc@planning.lacounty.gov>
Date: June 7, 2018 at 12:32:39 PDT
To: Steven Jones <sdjones@planning.lacounty.gov>
Cc: Rosie Ruiz <rruiz@planning.lacounty.gov>
Subject: FW: Centennial Development

-----Original Message-----
From: David Shluker <davidshluker@yahoo.com>
Sent: Thursday, June 7, 2018 12:31 PM
To: DRP LDCC <zoningldcc@planning.lacounty.gov>
Subject: Centennial Development

I am very strongly opposed to the Centennial Development. It is a 12,000 acre community that would include 20,000 homes. The project will ruin the habitats of protected species and contribute to urban sprawl that increases the region's car dependence, worsening air quality and generating more green house gases. The area is home to many endangered species including the California condor, San Joaquin kit fox and bald eagle. 99% of California native grasslands are already gone forever, you must not allow this project to be built and destroy what little remains.

ADD-G.36-1

Sent from my iPhone

Response to Comment Letter ADD-G.36
David Shluker
June 7, 2018

Response to Comment ADD-G.36-1:

Thank you for your comment and for your participation in this public process. The Commenter's statement of opposition to the Project is noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration. This comment does not raise specific concerns regarding the adequacy of the EIR and therefore no further response is required.

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Jodie Sackett

From: Jack T. <jacktca@gmail.com>
Sent: Friday, June 08, 2018 1:42 AM
To: jholt@signalscv.com; Jodie Sackett
Subject: what the Tejon Centennial plan is missing

risk

Tejon is under no pressure to build

First off, TRC (tejon stock symbol) is a tax shelter. It enables the top 1% club members to avoid short term capital gains tax if they made a bundle on risky investments on the stock market and want to get out and invest in more stable real estate. If they cash out and buy real estate they get hit with a big tax. If they buy TRC stock and wait around for a while before cashing out they avoid the tax.

Secondly, TRC is not a regular guy off the street who is forced to pay property tax for better or for worse. A regular guy buys a lot today. If the market goes south he still has to pay property taxes. If he fails to pay he loses his land. That's the risk. TRC has no such risk. TRC pays property tax on cow dung pastures. This is a gift from Los Angeles county to the 1% club investors in New York. They now de-facto own 20,000 building lots and continue to pay property tax as if it were farm land. They do not have to pay premium property tax until the market is fantastic and they find a buyer for their land. That's what's missing from the Centennial plan. There is no risk on the part of TRC. The bottom line is that if TRC paid property taxes on 20,000 house building lots they would be out of business with the first payment to LA County.

Thirdly, if one looks at the market cap (how much a company is worth if someone were to buy all the stock today) it is directly related to the value of lots in Grapevine, TMV, and Centennial as if they were building lots. So in effect what is happening is that the investors in New York all the positive benefits of owning California real estate without the negative benefit of risk involved with holding onto lots during the ups and downs of the market.

My question to you as a reporter is how does a company get away with such a sweet deal? I have sent comment after comment in to regional planning that complain about the lack of pressure on Tejon to build. They are ignored.

Here is what I would love to see. A few examples of middle class investors who lost their land or were forced to sell in the local vicinity because they could not afford the property tax on their building lots in bad years like 2008-2011. Then I would like to see a comparison of how much property tax Tejon pays for cow dung pastures to how much property tax they would be paying for building lots.

ADD-G.37-1

Response to Comment Letter ADD-G.37
Jack T.
June 8, 2018

Response to Comment ADD-G.37-1:

Thank you for your comment and for your participation in this public process. The Commenter's statement of opposition to the Project is noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration. This comment does not raise specific concerns regarding the adequacy of the EIR and therefore no further response is required.

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From: staceyflowerdew@everyactioncustom.com
To: Jodie Sackett
Subject: Centennial is the Wrong Vision for Los Angeles
Date: Monday, June 04, 2018 2:27:06 PM

Dear Jodie Sackett,

The grasslands, oak woodlands, wildflowers, and animals of Tejon Ranch belongs to all Californians. This is the last place on earth many of these species will ever be able to flourish. It would be a travesty to plant an entire city, and all the infrastructure needed for it, in the middle of one of the last vestiges of natural California that still exists.

The answer to L.A.'s congestion and traffic is not more sprawl. Building a city that decimates this Californian jewel only adds to the problems you are trying to alleviate while removing permanently a landscape and system of habitats that can never be replicated.

L.A. County has other choices than to build a city 45 miles away from L.A. Don't do it here. It is a bad plan, through and through.

ADD-G.38-1

Sincerely,
Stacey Flowerdew
Sacramento, CA 95818
staceyflowerdew@gmail.com

Response to Comment Letter ADD-G.38
Stacey Flowerdew
June 4, 2018

Response to Comment ADD-G.38-1:

Thank you for your comment and for your participation in this public process. The Commenter's statement of opposition to the Project is noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration. This comment does not raise specific concerns regarding the adequacy of the EIR and therefore no further response is required.

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From: m.rhyne@everyactioncustom.com
To: Jodie Sackett
Subject: Centennial is the Wrong Vision for a treasured open space in LA County
Date: Monday, June 04, 2018 4:15:17 PM

Dear Jodie Sackett,

This development is proposed for an area of the last remaining expansive native grasslands in Southern California. So important is the habitat, that it is the home of the only park set aside to protect the state flower, the California Poppy. The Antelope Valley California Poppy Reserve is perilously close to this proposed mega development. The proposed development would destroy remaining native grasslands in the West Antelope Valley that are known for springtime displays of native wildflowers. This decrease in adjacent habitat would have unknown but potentially devastating negative effects on the world famous Poppy Reserve.

The area would also destroy habitat in a Globally Important Bird Area as designated by the Audubon Society. It currently provides habitat for endangered wildlife including Swainson's hawks, tricolored blackbirds, desert kitfox and more. It would destroy remaining biological connectivity for the Angeles Forest and coastal ranges to the Tehachapi and Sierra Nevada mountains.

The community formed as a result of Centennial would be another area where families are stressed by long commutes and suffer from inadequate infrastructure and support from social services.

Centennial is wrong for birds, wrong for wildflowers and wrong for families

ADD-G.39-1

Sincerely,
Margaret Rhyne
Palmdale, CA 93551
m.rhyne@verizon.net

Response to Comment Letter ADD-G.39
Margaret Rhyne
June 4, 2018

Response to Comment ADD-G.39-1:

Thank you for your comment and for your participation in this public process. The Commenter's statement of opposition to the Project is noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration. The Antelope Valley California Poppy Reserve is located approximately 22 miles southeast of the Project site. The Project site and the Poppy Reserve are separated by the towns of Neenach, Three Points, and Fairmont. This comment does not raise specific concerns regarding the adequacy of the EIR and therefore no further response is required.

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From: anotherjessica@everyactioncustom.com
To: Jodie Sackett
Subject: Centennial is the Wrong Vision for Los Angeles
Date: Monday, June 04, 2018 10:34:10 PM

Dear Jodie Sackett,

U are incredibly dumb if u think paving over tejon ranch is even remotely acceptable. NO ONE WANTS THIS. Its bad on every front. Do u not care about nature at all? Do you not care that there are almost no untouched wildnerness left in california. Do u like being in your car all damnnn day. (Mispelled on purpose to avoid rejection)

ADD-G.40-1

Sincerely,
jessica t
Vacaville, CA 95688
anotherjessica@outlook.com

Response to Comment Letter ADD-G.40
Jessica T
June 4, 2018

Response to Comment ADD-G.40-1:

Thank you for your comment and for your participation in this public process. The Commenter's statement of opposition to the Project is noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration. This comment does not raise specific concerns regarding the adequacy of the EIR and therefore no further response is required.

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From: gtn5586@everyactioncustom.com
To: Jodie Sackett
Subject: Centennial is the Wrong Vision for Los Angeles
Date: Tuesday, June 05, 2018 4:17:41 PM

Dear Jodie Sackett,

Please preserve that which is irreplaceable. It took Nature millions of years to produce the wildness threatened with this development. Endure. Let your decision allow the natural world to endure. Be remembered for what you protected, not what you destroyed. Thank you for your time and consideration.

ADD-G.41-1

Sincerely,
George Nanoski
Long Beach, CA 90804
gtn5586@lausd.net

Response to Comment Letter ADD-G.41
George Nanoski
June 5, 2018

Response to Comment ADD-G.41-1:

Thank you for your comment and for your participation in this public process. The Commenter's statement of opposition to the Project is noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration. This comment does not raise specific concerns regarding the adequacy of the EIR and therefore no further response is required.

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From: 3pointsliebremountain@everyactioncustom.com
To: Jodie Sackett
Subject: Centennial is the Wrong Vision for Los Angeles
Date: Tuesday, June 05, 2018 4:47:33 PM

Dear Jodie Sackett,

Centennial should not be approved. This project, taking years to "build out," will require its residents to make long commutes. Eventually, building large industrial spaces will attract commuters from other areas of the Antelope Valley, Castaic, Bakersfield, Rosamond, Mojave, Santa Clarita, Frazier Mountain Communities, and Lancaster/ Palmdale. "Smart Growth" should not attract large volumes of commuter car travel, contributing unhealthy increases in air pollution for Antelope Valley. Combined with the proposed NW Hwy 138 Truck Route, and High Desert Corridor inland Truck Port contributing to increases in fine particulates in our air, including spores of the fungus causing Valley Fever in fugitive dust, we have components of a perfect storm related to public health from polluted air.

The project's Economic Opportunity Areas are exempt from other policies restricting density that protect other County residents from "Special Hazards," like flood, high fire hazard areas, earthquakes; and also exempt them from protecting riparian areas, groundwater recharge basins, significant ridgelines,
Hillside Management Areas, and the project can increase densities in the EOAs in the future.

Such development within and adjacent to sensitive habitats with such high biological value is unwise and does not protect these resources from the devastating effects of this massive development.

ADD-G.42-1

Sincerely,
Susan Zahnter
Lake Hughes, CA 93532
3pointsliebremountain@gmail.com

Response to Comment Letter ADD-G.42
Susan Zahnter
June 5, 2018

Response to Comment ADD-G.42-1:

Thank you for your comment and for your participation in this public process. The Commenter's statement of opposition to the Project is noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration. This comment does not raise specific concerns regarding the adequacy of the EIR and therefore no further response is required.

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3.2 RESPONSES TO PUBLIC TESTIMONY GIVEN AT JUNE 6, 2018 REGIONAL PLANNING COMMISSION HEARING

Testimony No.	Environmental Topic	Testimony	Response to Testimony
Kathleen Trinity			
RPC-1	Introduction	Good morning, Chairman Louie and Board. I'm Kathleen Trinity from Acton, California, and I oppose the development.	Thank you for your participation in this public process. The Commenter's opposition to the Project has been heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR and, therefore, no further response is required.
RPC-2	Biology	The proposed site for the Centennial development is the convergence of five ecological reg- -- regions. It is an extraordinary treasure, pristine in many parts. Most importantly, it nourishes and protects innumerable species of plants and animals, vast arrays of wildflowers and native grasses, two species of oak, reptiles, amphibians, small and large mammals, some of them rare and endangered or in decline. This is an extraordinary California treasure.	Thank you for your participation in this public process. The Regional Planning Commission heard this testimony and will consider it. It will also be passed on to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR, and no further response is required.
RPC-3	Biology	Opening it up for urban development is a betrayal of vast proportions of the land, our wildlife and our grandchildren. The construction of 23,000 units, including ancillary buildings, concrete foundations, paved roads, traffic, will decimate or push out most of the native habitat and wildlife in the immediate area.	The Commenter's opposition to the Project is noted, was heard by the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. This testimony does not specifically address the adequacy of the EIR, and no further response is required. The EIR thoroughly and appropriately analyzes Project impacts with regard to biological resources (see Draft EIR, Section 5.7) and traffic (see Draft EIR, Section 5.10) consistent with CEQA requirements, and mitigates impacts to the greatest extent feasible.
RPC-4	Biology	Beyond the immediate area it will discourage, degrade and limit wildlife linkages, preventing genetic diversity, especially for large animals.	The EIR appropriately analyzes potential impacts to habitat connectivity and wildlife movement, and the Project design and mitigation would ensure less than significant impacts. In the wildlife movement assessment, connectivity between the Tehachapi Mountains and the San Gabriel Mountains was considered in detail (Draft EIR, pages 5.7-50 to -64, -164 to -170). The thorough assessment concluded that although maintaining baseline connectivity between the two regions is essential, development of the Project would not significantly impact movement between these regions (*Id.,* page 5.7-166). The wildlife movement impact analysis beginning on page Draft

Testimony No.	Environmental Topic	Testimony	Response to Testimony
			EIR page 5.7-164 does conclude that development of the Project site will result in some losses of areas that may be used for foraging and/or breeding for species; pathways to or from foraging or breeding grounds on the Project site, such as along ridge-lines or canyon bottoms, may become "dead ends" to through dispersal. However, these losses are not expected to significantly impact wildlife movement, and sufficient habitat connectivity would be retained in the region for these species, especially given the substantial amount of similar terrain in the northwestern Antelope Valley area. Further, two regional conservation plans, the Tejon Ranch Conservation and Land Use Agreement and the TUMSHCP, although not providing mitigation for Centennial, would act in concert with the Centennial mitigation preserves to help sustain the functionality of the regional landscape linkage for future wildlife populations. Multi-generational gene flow (a series of connected wildlife movement events over time, allowing for genes to pass within and between populations) among wildlife populations in the region is expected to be sustained in the open spaces on and off the site that will remain following Project implementation. These open spaces provide sufficient habitat connectivity to allow for such gene flow. Implementation of MM 7-14, which designates a SR-138 wildlife underpass (along with a 50-foot open space buffer) where the current intersection with National Cement Plant Road exists, will also allow for local wildlife movement to pass through the Project area down to SEA 17. The direct impacts of Project development on wildlife movement, therefore, are considered less than significant after mitigation for local wildlife movement impacts. Nonetheless, the Draft EIR (page 7-17) discloses that the Project when combined with other projects in the region would result in a cumulatively significant impact on wildlife movement. Lastly, the Project design is consistent with the Antelope Valley Area Plan (AVAP) including with regard to open space designations, SEA protection, and preservation of habitat linkages. For further discussion of wildlife movement and habitat connectivity, please see Final EIR, responses to Comments B.2-3, B.4-34 to B.4-37, B.4-56, B.4-57, B.4-75, F.3-23 to F.3-25, F.3A-32 to F.3A-34, F.5-2, F.7-22, F.8-109, F.8-110, and F.8-165 through F.8-169.

Testimony No.	Environmental Topic	Testimony	Response to Testimony
RPC-5	Biology	The DEIR admits that urban development discourages native species in and around its footprint and will attract non-native urban adapted species like Norway rats and Argentine ants. The thousands of humans and domesticated pets will introduce noise, trash, pollutants and pathogens.	While the Draft EIR does acknowledge that urban development such as the Project tends to attract wildlife that is better adapted to urban settings, it does not conclude that Norway rats are invasive. See Draft EIR, Section 5.7, Biological Resources, page 5.7-168. With regard to non-native species, as noted by the Commenter, development of the Project would cause impacts to native species, and the Project has the potential to attract non-native species including Argentine ants. However, with MMs 7-16 through 7-18, impacts would be reduced to less than significant. (*Ibid.*) The EIR thoroughly and appropriate analyzes all potential impacts to biological resources associated with urban development. See Draft EIR, Section 5.7, Biological Resources. This testimony does not address the adequacy of the EIR, and no further response is required.
RPC-6	Biology	The DEIR mitigation measures of environmental education by pamphlet and signage are totally inadequate. The fact is that once you have invaded these wildlands, no so-called mitigation will lessen its impact in any significant way.	The Commenter's opinion with regard to the adequacy of the mitigation is noted, was heard by the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. The County disagrees with the Commenter's assertion, and notes that the EIR and Mitigation Monitoring and Reporting Program propose a comprehensive suite of mitigation measures to reduce impacts on biological resources, and education is merely a component of such measures.
RPC-7	Biology	The brief mention of medium and large mammals, such as badgers, prong-horned antelope, black bears, mountain lions, mule deer and gray foxes is grossly inadequate and vague in the discussion of these animals and their needs.	The EIR appropriately addresses potential impacts to all special status species or if Project impacts would reduce regional populations to below self-sustaining levels. Mammals mentioned by the Commenter do not qualify in either regard. In addition, the primary areas of regional movement are identified in the EIR, consistent with independent studies, as occurring outside the Project site. Wildlife movement impacts have been reduced to less than significant with the incorporation of mitigation measures. Regional movement for these species is not expected to be significantly impacted. With regard to human intervention with large mammals including bear and mountain lions, the Final EIR updated MM 7-17 to require educational materials be distributed that address these large native mammals, indicating they could prey on pets, indicating that no action shall be taken against such native animals, and indicating that pets must be leashed while using designated trail system and/or in any areas within or adjacent to open space, to reduce interaction. Control of stray and feral cats and dogs will be conducted in open space areas on an as-needed basis. See Appendix 2.0-C.Rev to the Final EIR, page C-81. For further discussion regarding these mammals, please see Draft EIR, Section 5.7, Biological Resources, pages 5.7-50 to -54, -63 to -65, -161, -166, and Final EIR, responses to Comments B.4-53 and F.5-8.

Testimony No.	Environmental Topic	Testimony	Response to Testimony
RPC-8	Miscellaneous	It does not take sufficient account of factors such as fire hazard, expansion of Highway 138, increasing traffic and loss of habitat, nor climate change's full impact.	The Commenter's opinion with regard to the adequacy of EIR analysis is noted, was heard by the Regional Planning Commission, and will be provided to the Board of Supervisors for their consideration. However, the County disagrees, noting that the EIR thoroughly and appropriately analyzes fire hazard (see Draft EIR Section 5.3), traffic-related impacts including with regard to SR-138 (see Draft EIR Section 5.10), loss of habitat (see Draft EIR Section 5.7), and climate change (see Draft EIR Section 5.21, consistent with CEQA requirements). This general testimony does not provide specific criticism of EIR analysis, and no further response is required.
RPC-9	Climate Change	Joseph Stewart of the University of San- -- UC Santa Cruz states "Climate is changing faster than species can adapt."	The Commenter appears to be quoting from an article by Kate Stone called Climate Change Threatens California Pikas, posted online for GotScience Magazine on February 4, 2015. Stone quotes Joseph Stewart saying: "The problem is that the climate is changing faster than species can adapt or disperse to new sites." See https://www.gotscience.org/2015/02/climate-change-threatens-california-pikas/. The County notes that climate change is a global phenomenon and an existing condition affecting the environment, including wildlife species. The Project EIR thoroughly analyzes potential Project-related climate change impacts, and appropriately concludes that despite the incorporation of all feasible mitigation, impacts would remain significant and unavoidable. See Draft EIR, Section 5.21, Climate Change; Final EIR, responses to Comments F.3A-71, F.8-79 to F.8-97, F.8-204, and F.8-235. This testimony does not address the adequacy of the EIR, and no further response is required.
RPC-10	Conclusion	When you consider your vote, please put yourself in the shoes of your grandchildren. Will they remember that you let this treasure be devastated, that we abandoned and betrayed this precious place for profit or tax base, or will they remember that it was saved and protected for them and their grandchildren? This is not the place for a new city. Thank you very much.	The Commenter's opposition to the Project and its location is noted, was heard by the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. However, the County disagrees with the Commenter's characterization of the Project, noting that the Project was sited and designed to promote regional "smart growth" planning principles established by the Southern California Association of Governments' (SCAG) 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy and the County's Antelope Valley Area Plan for the purpose of sustainably accommodating regional growth projections in a manner that reduces criteria pollutant and greenhouse gas (GHG) emissions and to promote public health. For a more detailed discussion, please see Final EIR, response to Comment F.8-20.

Testimony No.	Environmental Topic	Testimony	Response to Testimony
Margaret Ryan			
RPC-11	Introduction	I'm Margaret Ryan, a retired teacher and resident of the Antelope Valley for more than four decades.	Thank you for your participation in this public process. The Regional Planning Commission heard this testimony and will consider it. It will also be passed on to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR, and no further response is required.
RPC-12	Biology	This development is proposed for an area of the last remaining expansive native grasslands in Southern California. Implementation would destroy these remaining large expanses known for springtime displays of native wildflowers.	The Commenter's assertion that all grassland will have been lost if the Project is approved is incorrect. Draft EIR Section 5.7, Biological Resources, discloses the Project's potential impact to grasslands and determines that direct and indirect impacts would be mitigated to a less than significant level, but cumulative impacts to native grasslands would be a cumulative significant impact. (Draft EIR, pages 5.7-158, -162.) Project implementation would include mitigation at a ratio of at least 2:1 for grasslands, resulting in improved functions and values of grasslands on the Project site, in addition to preservation in perpetuity within the Centennial Mitigation Preserve as described in PDF 7-1 on page 5.7-135 of the Draft EIR. Intensive, multi-year grassland studies have revealed that grasslands of equal or greater value occur in vast quantities in the Mitigation Preserve. Please see Final EIR, responses to Comments B.4-17, B.4-43, B.4-63, F.7-22, F.8-124, F.8-125, F.8-127, F.8-128, and F.8-131 for further discussion of grasslands.
RPC-13	Biology	So important is the surrounding area that it is home of the only park set aside to protect the state flower. The Antelope Valley California Poppy Reserve is perilously close to this proposed mega development. During the 2017 poppy season, from March through mid May, more than 150,000 visited Poppy Reserve. The park was swamped, proving that its 1,800 acres are not adequate for the many people passionate about viewing native wildflowers. Mitigation for Centennial must provide provisions to expand the poppy reserve to increase easy access for the public who want to hike and picnic in a public park devoted to protecting wildflowers. The poppy reserve is already being impacted on its eastern borders by industrial solar development.	The Antelope Valley California Poppy Reserve is located approximately 22 miles southeast of the Project site. The Project site and the Poppy Reserve are separated by the towns of Neenach and Fairmont. Therefore, the Project is not anticipated to have a significant impact on the preserve, and, therefore, there is no mitigation required to address the preserve.

Testimony No.	Environmental Topic	Testimony	Response to Testimony
		Development of Centennial will cause the same kind of stresses on the west.	
RPC-14	Biology	Centennial would destroy habitat in the Antelope Valley globally important bird area.	The Commenter's opinion has been heard by the Regional Planning Commission and will be passed on to the Board of Supervisors for consideration. With regard to Project impacts on important habitat for migratory and nesting birds, features which attract such birds have been avoided by the Project and/or are being preserved. This includes Quail Lake, which is entirely avoided by and protected by Project mitigation measures, and features such as grass, scrub, and woodlands, which are retained in large quantities in the Mitigation Preserve and for which the Project identifies further mitigation measures to reduce impacts to the greatest extent feasible. Therefore, there would be no notable interruption in use of the Project site and surrounding areas such as Quail Lake by migratory and special status birds.
RPC-15	Biology	It currently provides habitat for endangered wildlife, including Swainson's hawk, tricolor blackbirds, desert kit fox and more.	With regard to Swainson's hawk, the EIR notes that potentially suitable foraging and nesting habitat for these species occurs on the site and is expected to occur for foraging but not for nesting. (Draft EIR, page 5.7-116.) Project-related impacts to this species would be less than significant with no mitigation; nonetheless, MM 7-2 would further ensure avoidance of impacts. (*Id.,* page 5.7-149.) The Project site provides suitable foraging and small amounts of suitable nesting habitat for tricolored blackbird, and there are nesting colonies on the Project site. (*Id.,* pages 5.7-113, -114.) To avoid all direct impacts and minimize indirect impacts to the nesting colonies on the Project site, MM 7-7 is included. With regard to kit fox, this species in not present on the Project site and the EIR therefore appropriately concludes that the Project site would have no impact on this species. See Draft EIR, Section 5.7, Biological Resources, for further information.
RPC-16	Biology	It would destroy not only habitat for native wildlife, but also the remaining connectivity from the Angeles Forest coastal ranges to the Tehachapi Mountains and the Sierra Nevada.	With regard to habitat connectivity and wildlife movement, please see Response to Testimony RPC-4. With regard to habitat loss, the EIR conclusion that habitat loss is not an adverse impact on wildlife resources at a project or cumulative level is consistent with the independent judgment of the scientists and representatives of the six leading environmental groups that signed the Tejon Ranch Land Use and Conservation Plan, as described in Final EIR, response to Comment F.3-12. The AVAP concentrates development within designated EOAs (including the West EOA location of the Project site), which the AVAP EIR concludes is environmentally superior to the development pattern allowed under the former Town & Country Area Plan in relation to multiple environmental resource considerations, including reduced impacts to biological resources. For further discussion regarding

Testimony No.	Environmental Topic	Testimony	Response to Testimony
			habitat loss, please see Draft EIR, Section 5.7, Biological Resources, pages 5.7-145 to -153, and Section 7.0, Cumulative Impacts, page 7-6; Final EIR, responses to Comments F.8-107 and F.8-108.
RPC-17	Affordable Housing	The community formed as a result of Centennial would be another area where families are stressed by long commutes and suffer from inadequate infrastructure and thinly-spread support for social services. If it was easy to place affordable housing adjacent to guaranteed employment centers, that would have already happened in the Santa Clarita and Antelope Valleys, and it most certainly has not.	The Commenter's opinion has been heard by the Regional Planning Commission and will be passed on to the Board of Supervisors for consideration. However, the County disagrees, and notes that the Project is designed to create a complete and balanced community, with appropriate infrastructure and services to be provided, and a mix of housing types affordable at different price points. This testimony does not address the adequacy of the EIR, and no further response is required.
RPC-18	Conclusion	Centennial -- Centennial is wrong for wildlife, wrong for wildflowers and certainly wrong for families. Thank you.	The Regional Planning Commission heard this testimony and will consider it. It will also be passed on to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR, and no further response is required.
Johnny Zamorza			
RPC-19	Support	Good morning, Commissioners, staff. Yes. My name is Johnny Zamorza. I've lived in the valley, Antelope Valley, since October of 1970. Prior to that, I raised livestock and alfalfa, loved it here, so I moved here to raise my family and have been here ever since. I still have a lot of family, including grandkids, that love the area as well. I own and operate a roofing and sheet metal business. We have five locations, and our headquarters are here in the Antelope Valley, so we've made a commitment to be a part of the community and the valley. I'd like to say I was lucky enough to be a member of the blue ribbon committee that was designated by Supervisor Mike Antonovich, but "lucky" is	Thank you for your participation in this public process. The Commenter's support for the Project was heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR and, therefore, no further response is required.

Testimony No.	Environmental Topic	Testimony	Response to Testimony
		probably not the right terminology, it was a long-term affair, but what I did learn working with the Department of Regional Planning and the development discussions of the old Town & Country Plan, now called the "Antelope Valley Area Plan," I learned a lot about Centennial and Tejon Ranch that I didn't know before. So as I said, I'm here to be -- to speak in favor of the Centennial project, no questions about it. Centennial's approval is important to the Antelope Valley and to the north area of L.A. County. As Los Angeles County continues to grow, we need to be good stewards of preserving the land and promoting growth in the right locations. Tejon, over the years, has been a great steward of the land, and I know that with the Centennial project, they would continue to be good stewards. This is what Centennial and Tejon Ranch has done. The land set aside as open space, you heard Greg Medeiros say 240,000 acres, that's a lot of land for a company to set aside for open space, but the part I want to refer to is the part that's with Centennial. That's 14,000 acres plus that goes with the Centennial project in L.A. County, so there's lots of room for habitat of all types, be it growing or living. The development is clustered within villages and town centers, and it's adjacent, as we know, to Interstate 5 and also 138. The spec- -- specific plan is the right kind of new development, and it's consistent with the goals and planning of L.A. County and the Antelope Valley Area Plan. If you look at the approved Antelope Valley Ar- -- Area Plan, there was balance between conservation	

Testimony No.	Environmental Topic	Testimony	Response to Testimony
		of our natural open space and the Antelope Valley economic growth. We need both. L.A. County Planning saw this importance, the blue ribbon committee saw it, and it's important that the board of supervisors see it as well. Thank you very kindly.	
Susan Zahnter			
RPC-20	Introduction	My name is Susan Zahnter. I am the director of the Association of Rural Town Councils and also the vice president of Three Points-Liebre Mountain Town Council. And I have a request at this time for an extra minute or two since I'm representing both entities. They may or may not completely agree, but I'd like to be able to say something on behalf of our town council as well. So that's my request, and I hope you can consider that for me.	Thank you for your participation in this public process. The Regional Planning Commission heard this testimony and will consider it. It will also be passed on to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR, and no further response is required.
RPC-21	Introduction	Thank you so much. First of all, thank you for the venue here in Lancaster. Our -- the ARTC requested the venue, and we appreciate your consideration in providing it. The association recently voted to provide comments on the project and its final environmental impact review. At this point in time, we're inclined -- inclined to oppose the project based on several factors.	Thank you for your participation in this public process. The Commenter's opposition to the Project was heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR and, therefore, no further response is required.

Testimony No.	Environmental Topic	Testimony	Response to Testimony
RPC-22	Miscellaneous	There are numerous unavoidable signif- -- significant impacts with regard to air quality, traffic, biological resources, special hazards, water quality, emergency services, public health and further impacts to several town council communities facing direct and indirect impacts resulting from the project as well as cumulative impacts from proposed major infrastructure projects.	The Commenter's testimony has been heard by the Regional Planning Commission and will be passed on to the Board of Supervisors for consideration. The EIR thoroughly analyzes the Project's potential direct, indirect and cumulative impacts on the environment, identifies fully enforceable mitigation measures that reduce impacts to the greatest extent feasible, and identifies impacts for which despite the identification of all feasible mitigation, impacts would be significant and unavoidable. Per CEQA, the Board of Supervisors may determine that the Final EIR has considered the identified means of lessening or avoiding the Project's significant effects and that to the extent any significant direct or indirect environmental effects, including cumulative project impacts, remain unavoidable, such impacts are acceptable in light of the social, legal, economic, environmental, technological and other Project benefits, that override them. See Draft CEQA Findings Regarding the Centennial Specific Plan Project and EIR, and Draft Statement of Overriding Considerations, for more details.
RPC-23	Miscellaneous	We have found that 10 days an inadequate amount of time to review the final impact -- final environmental im- -- impact review, evaluate its mitigations and determine their adequacy and form an appropriate response. The ARTC requested additional time on March 25th via written communication. However, no additional time was allotted for review, and we were informed 10 days were allowed by law. If the EIR had been made available on March 21st, we would have had more than 60 days to review it at this point in time, and this -- this hearing, I wouldn't be asking for more time.	The County has complied with CEQA requirements for consideration of the Final EIR. Following testimony at the June 6, 2018 Regional Planning Commission hearing, the Commission continued public hearing to July 11, 2018, and again to August 29, 2018 to allow further time for consideration.
RPC-24	Miscellaneous	On behalf of the Three Points Council, I would like to say we submitted a letter regarding the signage that was posted on the Highway 138 and the difficulties in accessing that sign and the fact that the dates that were visible to the passing public indicated "March 21st."	All required public notices regarding the Project have been provided in accordance with applicable legal requirements. Nevertheless, this comment's concerns regarding signage placed at and near the Project site regarding Project hearing date are noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration.

Testimony No.	Environmental Topic	Testimony	Response to Testimony
		We visited the site on June 2nd and found the site never updated. So I believe the signage has perhaps misdirected the public's idea of when the public hearing was supposed to take place on March 21st and never adequately updated, so I believe that's another point for extending the review period for people to respond and know that they can attend a public hearing.	
RPC-25	Miscellaneous	For our town council, the Antelope Valley Area Plan identified our community, which is right -- the end of our council boundary is at the edge of Quail Lake, so we face the Centennial project in -- in several areas. The plan describes our community as a very remote environment. The Centennial project is in a similar very remote environment, and we wonder how this project can be considered anything other than specific plan sprawl and sustainable or smart growth.	The Project has been situated and designed to promote regional "smart growth" planning principles established by the Southern California Association of Governments (SCAG) 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy and the County's Antelope Valley Area Plan (AVAP) for the purpose of sustainably accommodating regional growth projections in a manner that reduces criteria air pollutant and greenhouse gas emissions and promotes public health while protecting regional open space, Sensitive Ecological Areas and agricultural areas consistent with the AVAP's Rural Preservation Strategy. For further discussion, please see the Final EIR, response to Comment F.8-20.
RPC-26	Miscellaneous	We are -- we're extremely concerned about all of the -- all of the significant impacts that I spoke of earlier, so in order that we have adequate time to review the mitigations, and that was previously -- previously mentioned by the Commission board member, that we request additional time and hope that we'll be able to get that. Thank you so much.	The County has complied with CEQA requirements for consideration of the Final EIR. Following testimony at the June 6, 2018 Regional Planning Commission hearing, the Commission continued public hearing to July 11, 2018, and again to August 29, 2018 to allow further time for consideration.

Testimony No.	Environmental Topic	Testimony	Response to Testimony
Merrylou Nelson			
RPC-27	Introduction	Good morning. My name is Merrylou Nelson, and I am commenting today in opposition of this project. At this point in time, I oppose the project based on several factors.	Thank you for your participation in this public process. The Commenter's opposition to the Project was heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR and, therefore, no further response is required.
RPC-28	Miscellaneous	There are many unavoidable significant factors with regard to air quality, traffic, biological resources, special hazards, water quality, emergency services, public health and many additional impacts to our community.	The Commenter's testimony has been heard by the Regional Planning Commission and will be passed on to the Board of Supervisors for consideration. The EIR thoroughly analyzes the Project's potential direct, indirect and cumulative impacts on the environment, identifies fully enforceable mitigation measures that reduce impacts to the greatest extent feasible, and identifies impacts for which despite the identification of all feasible mitigation, impacts would be significant and unavoidable. Per CEQA, the Board of Supervisors may determine that the Final EIR has considered the identified means of lessening or avoiding the Project's significant effects and that to the extent any significant direct or indirect environmental effects, including cumulative project impacts, remain unavoidable, such impacts are acceptable in light of the social, legal, economic, environmental, technological and other Project benefits, that override them. See Draft CEQA Findings Regarding the Centennial Specific Plan Project and EIR, and Draft Statement of Overriding Considerations, for more details.
RPC-29	Miscellaneous	Additionally, there are cumulative impacts as yet undefined or not yet adequately reviewed as the final documents have not had a substantial final review given the 10-day comment period.	The Commenter's opinion has been heard by the Regional Planning Commission and will be passed on to the Board of Supervisors for consideration. However, the EIR thoroughly analyzes cumulative impacts. See Draft EIR, Chapter 7.0, Cumulative Impacts. This testimony does not provide specific support for this assertion, and no further response is required. The County has complied with CEQA requirements for consideration of the Final EIR. Following testimony at the June 6, 2018 Regional Planning Commission hearing, the commission continued public hearing to July 11, 2018, and again to August 29, 2018 to allow further time for consideration.
RPC-30	Miscellaneous	I strenuously object to planning allowing only 10 days to review such a far-reaching project given its permanent and inevitable far-reaching effects on surrounding rural communities.	The County has complied with CEQA requirements for consideration of the Final EIR. Following testimony at the June 6, 2018 Regional Planning Commission hearing, the commission continued public hearing to July 11, 2018, and again to August 29, 2018 to allow further time for consideration.

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RPC-31	Miscellaneous	Antelope Acres will see unavoidable effects such as permanent traffic, noise, air quality and health impacts due to the project itself. Over time, it will drive projected revisions to Highway 138, which, when implemented, will change the face of my community forever and sacrifice at least 16 properties, which mean the loss of 16 family homes to our community, and that is the current projection, not necessarily the final plan.	The Commenter's opinion has been heard by the Regional Planning Commission and will be passed on to the Board of Supervisors for consideration. The EIR thoroughly analyzes and mitigates potential impacts on surrounding areas to the greatest extent feasible. With regard to the Project's relationship to the Northwest 138 Improvement Project, the Northwest 138 Improvement Project addresses significant existing and reasonably anticipated future needs irrespective of Centennial approval and development. Please see response to Comment ADD-F.10-5 for further discussion[3281].
RPC-32	Miscellaneous	Our community has already been invaded by solar projects, and the entities given the responsibility to protect us have not created a plan to assure that our health and safety are protected. Lancaster City officials and Los Angeles County Regional Planning have allowed all planned solar projects to be completed with no regard to their cumulative effects. There is no oversight to create sane growth in the renewable energy industry.	The Regional Planning Commission heard this testimony and will consider it. It will also be passed on to the Board of Supervisors for consideration. This comment about separate solar projects does not address the adequacy of the EIR, and no further response is required.
RPC-33	Miscellaneous	Jurisdictional boundaries are adding to this dilemma, as there are no coordinated efforts between the responsible entities to change those conditions.	The Regional Planning Commission heard this testimony and will consider it. It will also be passed on to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR, and no further response is required.
RPC-34	Public Health	Emphysema, COPD, asthma and valley fever statistics show a dramatic increase in the Antelope Valley with no change in sight.	The Commenter's testimony is noted, was heard by the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. The EIR thoroughly analyzes potential air quality and related health impacts of the Project and identifies appropriate mitigation to ensure impacts are reduced to a less than significant level to the greatest extent feasible. Specifically, with regard to Valley Fever, the EIR appropriately analyzes and discloses potential Project impacts related to Valley Fever, including with regard to the condition, potential for Valley Fever spores to be found in soils in the Antelope Valley, the effects of contracting Valley Fever, and risks from possible exposure to both construction workers and Project residents. See Draft EIR, Section 5.3, Hazards and Fire Safety, pages 5.3-13 to -14 and -17 to-19, Section 5.11, Air Resources, pages 5.11-28 and -29, and -

[3281] For responses to comments in letters ADD-C.2, ADD-F.8 through ADD-F.14, and ADD-G.49 through ADD-G.58, please see Responses to Additional Correspondence Received Through August 13, 2018.

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			64 through -67; Final EIR, responses to Comment F.3-29 through F.3-32, F.3A-5, F.3A-38 through F.3A-45, F.3A-68, F.3A-69, and G.13-1. Implementation of fugitive dust control measures required by AVAQMD and SCAQMD and MMs 3-2 and 3-3 would mitigate impacts related to Valley Fever to be less than significant. See also see response to Comment ADD-F.13-10, which further revises valley fever mitigation. This testimony does not address the adequacy of the EIR, and no further response is required.
RPC-35	Air Quality	The AVAQMD, which is the lead agency, had no comment when the DEIR was released.	The Commenter's concern regarding lack of AVAQMD comments on the Draft EIR is noted and will be provided to the Regional Planning Commission and Board of Supervisors for consideration. However, AVAQMD does have an important role in the CEQA process for this Project. As described in Draft EIR Section 4.8, Intended Use of the EIR, the County is lead agency for the Project, and AVAQMD is a responsible agency. (Draft EIR, pages 4-102, -110.) Approximately 85 percent of the Project site lies within the Mojave Desert Air Basin, over which AVAQMD has jurisdiction for air quality. Developers and businesses who plan to install equipment with the potential to emit air pollutants, including toxic and hazardous air pollutants, must obtain permits from the applicable Air Quality Management District prior to construction or operation. Examples of businesses and equipment that require permits are gas stations, dry cleaners, emergency generators, boilers for heating and hot water in large buildings, restaurant cooking equipment, and manufacturing facilities. Accordingly, AVAQMD was provided with an opportunity to review the EIR and is expected to use the information in the EIR for consideration of approvals related to and involved in the implementation of the Project. This comment does not specifically address the Project or the adequacy of the EIR, and no further response is required.
RPC-36	Air Quality	The South Coast Air Quality Management District's emissions exceeded the air quality impacts would exceed the CEQA and significant threshold for volatile organic compounds PM 2.5 and PM 10.	The air quality analysis in Section 5.11, Air Resources, of the Draft EIR was conducted based on the methods recommended by the SCAQMD for criteria pollutants and TACs, as discussed on pages 5.11-18 through 5.11-22. Project related air pollutant emissions were evaluated both in terms of contributions to regional air quality and localized impacts to uses proximate to the Project site. As this comment correctly notes, the Draft EIR disclosed that there would be significant and unavoidable air quality impacts related to construction emissions in the jurisdiction of the AVAQMD as well as the SCAQMD. Long-term operational emissions were also found to exceed the AVAQMD and SCAQMD thresholds of significance for regional emissions. However, it should be noted that the South Coast Air Quality Management District (SCAQMD) has reviewed the Centennial EIR and determined that the Project's Centennial Specific Plan "exemplifies [the County's] leadership in promoting sustainable communities development" and "will help reduce

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			emissions from mobile sources, protect the public health from air pollution, and achieve healthful air in the [South Coast Air] Basin" (see Final EIR, Comment D.4-2).
Larry Grooms			
RPC-37	Support	Oh, hi. I'm Larry Grooms. I'm a resident of Lancaster, and I'm speaking in support of the Centennial project both for myself as an individual and on behalf of associates in the central valley part of biz-fed. The master-planned Centennial community will be a key asset in the economic, social and environmental future of the entire Antelope Valley region, which includes technology job hubs in both northern Los Angeles and southeastern Kern Counties. Centennial's location puts it within easy reach of growing job markets, 50 miles to Bakersfield, 35 miles to Santa Clarita, 36 miles to Lancaster, 42 to Palmdale, 52 to Mojave Air and Space Port and 57 miles to the main base of Edwards. By virtue of its location alone, the future community of Centennial already has immediate proximity to the Interstate 5 freeway north and south, and State Route 138, already in planning for expansion, will provide a long-needed and economically beneficial east-west connectivity for the entire southern and central California regions. The 19,000-plus homes to be built in Centennial over 20 years or more will assure high quality of life housing remains available and affordable in our area. Centennial is already a carefully crafted component of the Los Angeles County Antelope Valley Area Plan adopted in 2015. That plan provides a balance	Thank you for your participation in this public process. The Commenter's support for the Project has been heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR and, therefore, no further response is required.

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		for economic opportunity and conservation, and it designates Centennial and the westerly economic opportunity area, including its land use for residential, commercial, light industrial development as well as significant conserved open space. That said, Centennial does not exist in a vacuum. It will interact with the entire region and have effects, and most of those, on balance, will be in a very positive manner. In the long term, this sustainable, environmentally friendly and largely self-sufficient community will transform what was once a place considered to be in the middle of nowhere into a crossroads in the middle of everything north, south and east. Thank you.	
Diane Carlton			
RPC-38	Support	Good morning. My name is Diane Carlton, and I am a lifelong resident of the Antelope Valley. I was born here, I have raised my family here, and all of that has been spent in the western portion of the Antelope Valley near where Centennial will be located. I am here to speak in support of the project. I believe it to be an outstanding project based on the fact that I have worked with regional planning for many years on different county ordinances and zoning, particularly in areas that pertain to the Antelope Valley. I am committed to keep doing so to make sure the Antelope Valley continues to reach its potential, its goals of economic growth and affordable housing,	Thank you for your participation in this public process. The Commenter's support for the Project has been heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR and, therefore, no further response is required.

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		which will allow families to continue to live and play in the Antelope Valley. I applaud the Regional Planning Commission for the work that they have done, for the staff who has worked diligently these many years on -- with Centennial in preparing this EIR and the draft before you today. Centennial has done this to make sure that the project is something that everyone in the Antelope Valley can be proud of. I'm very excited for the new services that this project will bring. It will bring new fire stations, sheriff's substation, schools, a library, parks, things that are much needed in the western part of the Antelope Valley and currently are lacking. In fact, some schools have closed, so students are bused long distances. Centennial will also provide jobs for the future. This is something that every area needs, and ours is no exception. When I review the specific plan and see that -- the standards for village centers, open space parks and transportation mixed in with housing and community living and inclusion of the bike paths, I am happy the county has listened to what the residents of the Antelope Valley want, as evidenced in the plan. I hope you will approve the Centennial Specific Plan and take the recommendations of staff to heart and know that this project is what -- something that is truly needed in the Antelope Valley. Thank you.	

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Sarah Tyndall			
RPC-39	Support	Good morning. My name is Sarah Tyndall, and I have been a resident of the Antelope Valley all of my life. I am here speaking on behalf of the Palmdale Chamber of Commerce, and we are here in full support of the Centennial project. As you know, Centennial lies within the west economic opportunity area. In the Antelope Valley Area Plan, an op- -- economic opportunity area is defined as a location that has significant opportunities for growth and economic development. Centennial will take full advantage to ensure the necessary growth and economic development is brought to the area. 19,000 new homes will bring a significant boost to our local economy. 23,000 permanent jobs will be brought to the Antelope Valley, which will contribute $21.5 million in surplus for the County of Los Angeles. Centennial is the growth that our working and middle class families need to be able to own their first home. Centennial is the sustainable community that residents will be able to live and work at. The economic viability of our region depends on smart community planning, and that is exactly what the Centennial project will bring to the Antelope Valley. The Palmdale Chamber requests your approval today. Thank you.	Thank you for your participation in this public process. The Commenter's support for the Project has been heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR and, therefore, no further response is required.

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Richard Skaggs			
RPC-40	Support	Good morning, Commissioners. I'm Richard Skaggs. I represent the Oso Town Council and the Neenach area, and we are adjacent to the project itself, and we're in fully support of the project. Tejon Ranch has been a very good neighbor forever. I've been there since '03, and we enjoy the help they've been giving to the community. The project itself, I'm not going to repeat everyone because I think that Linda said it all, I think the most important thing to our community is the safety. Our Highway 138, we have several people in our community that were killed on this highway, and with the new highway coming in once they start this project, I think it's going to be much better, safer for our community. I think it's a shame when you lose human beings in our community like this. Also, the other thing is the sheriff substation. We've been trying to get a substation in our community for the last 20 years. The sheriff works out of his car. So again, all these things, with outsiders, they don't understand that we're in a community with no services. We have to drive to Lancaster. We have to drive to Palmdale. So with this project, it's going to be a great project for our community of 840 people, and we're the closest to the project, and we've been working very closely with the Centennial -- Centennial people for many years, and we're in fully support. Thank you very much.	Thank you for your participation in this public process. The Commenter's support for the Project has been heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR and, therefore, no further response is required.

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Brett Tremaine			
RPC-41	Support	Yes. Good morning, Mr. Chairman, and members of the Commission. My name is Brett Tremaine. I am partners with Ed Roski with Majestic Realty. And so I appreciate all of you taking the time to hear public comment today. We -- as many of you may know, we authored a letter back in March in -- in support of the project, and we believe in the growth of northern Los Angeles County. I think many of you may know, we've -- we're a long-time, family-owned-and-operated business in Los Angeles County, we've been here since 1948, and we own and operate approximately 80 million square feet of industrial, manufacturing and warehouse space in this community. We -- we believe in Tejon Ranch, and I will share with you that we are investors in that project, we have built a facility up in Tejon Ranch, and we've also purchased an existing asset there, so we're committed. I'm not just here speaking on behalf of Tejon Ranch, but we're actually in that community and -- and are invested in it already. When we go into communities, we look at a lot of different aspects. We look at transportation, we look at labor, and the aspects along that are also housing, and we're very, very confident in that marketplace in Tejon Ranch, we think it's a great growth spot for L.A. County, but we do see a need for affordable housing and housing that will complement the growth of job creation in that area.	Thank you for your participation in this public process. The Commenter's support for the Project has been heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR and, therefore, no further response is required.

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		So as we sit here today, we look at the affordable housing aspect as a balance to the community. These are live-work environments. We see it as a place where first-time buyers can come in and that they can actually live in an environment where they work, where they're not sitting an hour and a half on the freeways driving in, but they can be employed in a community and work in a community and shop and have kids in schools and -- and make it a -- kind of a thriving not only a commerce, but a residential place. And so I will tell you that we -- we see it, frankly, as, in effect, the missing link up there to see this residential growth occur and to see the affordable side of that. If you look at the demographics of the people that are within our properties and our tenants, there's a nice balance of entry-level jobs and higher-level executive jobs in -- in multiple disciplines, both technical, and we see more and more high-skilled jobs within these facilities because there's so much technology involved, and we see that a community like this will really support that. So I would -- maybe just in a brief closing comment, we have been involved with the executive team at Tejon Ranch for many, many years now, we're formerly partners with them, and they're good people. They are such that they stand up and do what they say they're going to do, and they're very good stewards of the ranch, and there's been a lot of decisions when we've been involved with them where they've made long-term decisions. And so I think that this is a project that will complement the ranch long term and the growth of L.A. County.	

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		So on behalf of myself and of course Ed Roski and Majestic, we are in favor of the project, and we would ask for your support and your vote. I thank you.	
Justin Rockey			
RPC-42	Support	Thank you. And good morning. My name is Justin Rockey, and I'm the Vice President of Operations for Progression Drywall Corporation, a larger union drywall contractor. We are actually based out of Lancaster. I've been a resident of the Antelope Valley since 1978, two days after my birth date, so I'm nowhere near retirement, but I'm here today to express my positive im- -- impact and flow on this project. I've sat in meetings on this project since the beginning, in 2002 in the Antelope Valley when this first came about, so I'm happy to be here today and support it. One of the things that is crucial, as some people have said in support today, is that this will create local jobs for employees that are spending a tremendous amount of time away from their families. You know, I have 385 employees on payroll this week, and most of them live in Lancaster and spend most of their life on the freeway. Even myself today, I'm upset that I couldn't be on the Skype from Lancaster. I was up at 4:00 in the morning to get down here for a 9:00 o'clock meeting. It's 69 miles from my house to here, and it takes more than two and a half hours to make sure you're on time for something of this importance.	Thank you for your participation in this public process. The Commenter's support for the Project has been heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR and, therefore, no further response is required.

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		So along the lines of that, you know, they're talking about creating 25,000-plus construction jobs in this area with this project. I think that it -- it is not -- it is very well thought out. I think that there's obviously much work to be done, you know, there is a cre- -- a huge body of work done, but a huge body of work to do, but their plan will provide an opportunity to boost our local economy and the surrounding business because the expenditures are going to be kept internal and local. I think that we're looking at a possibility of keeping local work force up there off the freeway, which lessens car accidents, gives people time to just be at home and give their kids help with their homework, and I think you'll see divorce rates go down, and I'm speaking -- I'm speaking of this from -- I manage hundreds of people that are -- their lives are very much affected by having to be on the freeway, and if anybody in this room can be familiar with that, they know. Centennial is designated in the west economic opportunity area in L.A. County's Antelope Valley Area Plan, which was approved by the board of supervisors in 2015. It's consistent with the AVAP and intent of the economic opportunity of area, Centennial would accommodate sustainable growth in the Antelope Valley. The fact of the matter is it is a beautiful place. I happen to be a resident of the Antelope Acres in Lancaster with a full operating horse ranch with cattle and horses and dogs that bark and all of that, so I see that side of things, but I also see the side of things of the people, and I think that this is a huge opportunity to take care of many, many people. I do believe that the senior housing thing was a very good point brought up. My drywall company, we do a tremendous amount of affordable housing, low income, veterans, senior, that's kind of the	

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		nature of my business, very much prevailing wage, so I do see that side of things. But all in all, I think that this will connect the Antelope Valley to the Central Valley and create huge, huge economy in that area and huge growth, and -- and I think all in all, it will help the human kind in that area as well. So thanks for having me, and please consider it.	
RPC-43	Miscellaneous	COMMISSIONER MODUGNO: And -- and I appreciate the fact in terms of since I live along the I-5 corridor, in fact a mile away from it and have to get -- fight with the traffic with the trucks, appreciate that the labor, if you were successful in winning the job of doing some of the work on this project, will be coming from -- mostly from Lancaster across the 138 in, where would materials come from? Where do you bring your drywall in from? Would it be coming from Los Angeles north or be coming south, or would it be coming east, sort of east? JUSTIN ROCKEY: The -- the major- -- the majority of our drywall materials come from Las Vegas, so you're talking about coming right through that freeway right there. COMMISSIONER MODUGNO: So potentially across the 15 and then up through 138, 14 across – JUSTIN ROCKEY: Right down the 14, get off on Avenue D, the 138 out there. And the one gentleman that spoke from Lancaster talking about the 138 freeway, anybody that's driven it knows it needs work. It has -- there has been numerous people killed on that corridor. It is -	The Commenter is thanked for their participation in this public process, and their response to Commissioner Modugno's question. The County notes that the Commenter has not been selected as a provider for Project construction materials. Further, MM 21-21 requires contractors to use locally available and recycled building materials, provided such materials meet all applicable Building Code and other requirements, and are readily available and comparably priced to assure such materials do not increase the cost and decrease the affordability of housing or community infrastructure. See Final EIR, Appendix 2.0-C.Rev, page C-164.

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		- I live on Avenue I, and that's Avenue D, so if anybody checks the map, not very far at all. And I -- I'm telling you there is very, very much need for this work. It's going to create a tremendous amount of infrastructure. It's going to create a tremendous amount of work in the area. I -- I enjoy the Tejon Ranch. I actually have a horse that -- te- -- Tejon is in the horse's name. It came from that ranch. We go there. We ride horses there. This side of the project is not even really going to be affecting the ranch side of the project, I mean -- okay. COMMISSIONER MODUGNO: I -- I didn't want to get – JUSTIN ROCKEY: Yeah. Don't get me wrong. I – COMMISSIONER MODUGNO: We have a lot of people here. I just want to get answers to – JUSTIN ROCKEY: But -- there's a lot of people to speak, but anyways – COMMISSIONER MODUGNO: Okay. JUSTIN ROCKEY: -- the materials will be -- most of my materials will be coming from Vegas, and a lot of materials do come through the Vegas route that way.	

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Melissa Lippencott			
RPC-44	Introduction	My name is Melissa Lippencott. And I oppose the Centennial specific plan.	Thank you for your participation in this public process. The Commenter's opposition to the Project has been heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR and, therefore, no further response is required.
RPC-45	Biology	Creation of a new city in a currently undeveloped remote portion of northwest L.A. County far from jobs and situated in a unique ecological area with remarkable wildlife habitat and plant diversity will have severe environmental impact despite the less than significant environmental impact finding in the south county plan, impacts to sensitive habitat, including vast amounts of native grassland, wildflower fields and their associated pollinators, rare plants, oak woodlands, in addition to mult- -- abundant wildlife in the area. This project would result in loss of wildlife habitat, loss of wildlife corridor -- corridors. It's surrounded by significant ecological areas and -- I get so nervous. It -- it's surrounded by significant ecological areas, and it's in a unique transition zone.	The Commenter's disagreement with EIR impact significance conclusions with regard to biological resource impacts is noted, was heard by the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. However, the County notes that Section 5.7, Biological Resources, and Section 7.0, Cumulative Impacts, of the Draft EIR thoroughly and appropriately analyzed impacts to biological resources consistent with CEQA requirements, relying on extensive expert study. For further discussion with regard to habitat loss, please see Final EIR, responses to Comments F.8-108 and F.8-109. With regard to grasslands and wildflowers, please see Final EIR, responses to Comments B.4-17, B.4-43, B.4-63, F.7-22, F.8-124, F.8-125, F.8-127, F.8-128, and F.8-131. With regard to rare plants, please see Final EIR, responses to Comments F.8-128 through F.8-131. With regard to oaks and oak woodlands, please see Draft EIR, responses to Comments A.2-7, B.4-50, B.4-41, and F.8-132 through F.8-125. With regard to wildlife movement and connectivity, please see Final EIR responses to Comments B.2-3, B.4-34 to B.4-37, B.4-56, B.4-57, B.4-75, F.3-23 to F.3-25, F.3A-32 to F.3A-34, F.5-2, F.7-22, F.8-109, F.8-110, and F.8-165 through F.8-169.
RPC-46	Traffic Greenhouse Gas	This project and the cumulative impacts of the Grapevine and Tejon Mountain Village Project would result in increased traffic, long commutes to L.A., a freeway already clogged with traffic, increased greenhouse gas emissions and resulting in climate change, air pollution, edge effects. Edge effects.	This testimony was heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. The EIR thoroughly and appropriately analyzes and discloses potential impacts on surrounding areas consistent with CEQA requirements and identifies all feasible mitigation to reduce such impacts. That includes cumulative impacts, discussion of which can be found in Draft EIR Section 7.0, Cumulative Impacts. This testimony does not address the adequacy of the EIR, and no further response is required. With regard to edge effects, please see Response to Testimony RPC-47.
RPC-47	Biology	So these -- these projects are surrounded by significant ecological areas. You have Angeles National Forest, we have the Los Padres National Forest, we have Tejon Ranch.	This testimony was heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. The EIR thoroughly and appropriately analyzes and discloses potential edge and/or indirect impacts on surrounding areas consistent with CEQA requirements and identifies all feasible mitigation to reduce such impacts. The Project site's

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		All of these areas are significant because of their wildlife habitat and rare plants and rare and sensitive wildlife species, so the edge effects include things like increased fire intervals, trash, pets, well, just increased human use on these sensitive areas.	development areas and preserved areas have been specifically chosen with the intent to minimize edge effects so that the biological resources within them are not jeopardized by the Project or potential future development in the region. For further discussion of edge effects, please see Draft EIR, Section 5.7, pages 5.7-54, PDF 7-1 at pages 5.7-136 and 5.7-160, This testimony does not address the adequacy of the EIR, and no further response is required.
RPC-48	Hazards Biology	I mean Valencia and Santa Clarita, great examples. Every -- every open space area around those cities has burned in the last five years, and so we have this wildlife habitat surrounding these -- these new developments, and they burn down, and where are the wildlife going?	With regard to fire, the EIR appropriately evaluates the Project's potential fire safety impacts under two thresholds of significance. First, the Draft EIR considers whether the Project would expose people or structures to a significant risk of loss, injury or death involving fires because it is located (i) within a Very High Fire Hazard Severity Zone (VHFHSZ), (ii) within a high fire hazard area with inadequate access, (iii) within an area with inadequate water and pressure to meet fire flow standards, or (iv) within proximity to land uses that have the potential for dangerous fire hazard. Second, the Draft EIR considers whether the Project constitutes a potentially dangerous fire hazard. The Draft EIR determined that, with implementation of MM 3-9, Project impacts related to fire hazards would be less than significant under both applicable thresholds of significance. The Draft EIR concluded that Project impacts related to fire safety would be less than significant only after taking into consideration (i) Project site access, (ii) Project site water flows, (iii) Project site topography, (iv) Project site vegetative cover, (v) existing and proposed regulatory controls, (vi) existing mutual aid agreements between federal, state, and local fire safety service providers, and (vii) Project improvements and mitigation measures related to landscaping and vegetation management, building construction, circulation, public utilities, and fire protection services, including but not limited to MM 3-9. Specifically, with regard to protection from fire for surrounding open space areas and wildlife residing there, MM 3-9 requires implementation of a Fuel Modification Plan, whose major components will ensure a minimum 20-foot setback from the edge of any structures; an irrigation and transition zone from 20-100 feet away, and native brush thinning zone between 100 and 200 feet away from structures. For further details of fuel modification requirements, please see Draft EIR, Section 5.3, and Final EIR, responses to Comments A.2-6, F.8-63, and F.8-64.

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RPC-49	Biology	We need -- we need a buffer between these residential areas and these wilderness areas, and -- and that -- that isn't included in any -- any of the plan. Despite the fact that they're, you know, protecting these areas, it's still going to be directly impacted by these projects.	The Commenter's requested buffer between development and open space is included in the Project. The Project requires implementation of a Fuel Modification Plan per MM 3-9, whose major components will ensure a minimum 20-foot setback from the edge of any structures; an irrigation and transition zone from 20 to 100 feet away, and native brush thinning zone between 100 and 200 feet away from structures, to reduce fire events and protect open space areas. For further details of fuel modification requirements, please see Draft EIR, Section 5.3, and Final EIR, responses to Comments A.2-6, F.8-63, and F.8-64.
RPC-50	Conclusion	So anyway, by approving the Centennial project, you would increase sprawl, increase traffic, increase fire frequency, increase use of water in an already -- in an area that's already -- has very little water, increase air pollution, increase climate change, destroy beautiful, natural open space and our beautiful state, decrease wilderness, decrease wildflowers, decrease pollinators, decrease wildlife, destroy habitat, remove wildlife corridors, increase roadkill. Oh, I'm finished? Okay. Thir- -- 30 seconds or -- okay. Oh, no. That's it. That's it. I think I've made my point. Thank you.	The Commenter's opinion is noted, was heard by the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. The Commenter's opposition to the Project is noted. The EIR thoroughly analyzes and discloses potential impacts with regard to all topics raised by the Commenter. Further, the County disagrees with the Commenter's characterization of the Project. The Project does not constitute sprawl. Rather, the Project has been situated and designed to promote regional "smart growth" planning principles established by the Southern California Association of Governments (SCAG) 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy and the County's Antelope Valley Area Plan (AVAP) for the purpose of sustainably accommodating regional growth projections in a manner that reduces criteria air pollutant and greenhouse gas emissions and promotes public health while protecting regional open space, Sensitive Ecological Areas and agricultural areas consistent with the AVAP's Rural Preservation Strategy. For further discussion, please see the Final EIR, response to Comment F.8-20.
Mike McMillen			
RPC-51	Support	Thank you, Mr. Chair, other members of the Planning Commission. Good morning. My name is Mike McMillen. I'm Vice President of the TRI Pointe Group.	Thank you for your participation in this public process. The Commenter's support for the Project has been heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR and, therefore, no further response is required.

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		We are a land development and home building company. I am here today to speak in favor of the Centennial project as well as to share some of the economic benefits of the project. As mentioned a couple of times today, we are in the midst of a housing crisis. We're seeing both high demand as well as an imbalance of the housing shortage that's going on today in the market, but more importantly, we're seeing a need for more price-attainable housing to serve the families throughout L.A. County. Both the -- both the working class and middle class families have a desire to get into home ownership, and we believe the cen- -- Centennial project will take a significant step to resolve this issue. In addition, Centennial provides substantial economic benefits. Some of these will include new jobs, income for local community as well as a -- an opportunity for residents and to generate tax revenue for local governments. Interesting to note, a local study was conducted recently by the National Association of Home Builders. They took a look at the one-year impact related to just 100 single-family homes, and the results are pretty astonishing. The results show that the 100 units on an annual basis generate about $30 million in local income as well as almost $4 million in tax revenue, but equally as important will create almost 400 jobs in the local community. If you extrapolate this data to the over 19,000 homes that are projected to be built at the Centennial project, the project itself will generate over $30 million in tax revenue on an annual basis in surplus to the county as well as also generate	

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		over 20,000 permanent jobs on a long-term basis. That's pretty significant. As I sit here today, we all know we have this housing crisis. We must alleviate this. More importantly, we think there's a real opportunity here to provide housing and home ownership to the residents throughout L.A. County. We believe Centennial will accomplish this goal. To conclude, I just want to make note that this project is consistent with the Antelope Valley Area Plan. And so with that said, today I ask for your support and recommend your approval of this project today. Thank you.	
Anne Burnaugh			
RPC-52	Support	Thank you very much. My name's Anne Burnaugh. I've been a resident of the Frazier Park mountain communities for over 30 years, and for the past 20 I've been the director of the Mountain Communities Family Resource Center in Frazier Park, so when I say that I have a sense of the communities that I've lived in and that -- the people I've served, I think I have credit to do that. We are providing services from local resources and from county -- Kern County and Los Angeles resources for our communities. We are enriching our families, enhancing our community and empowering our youth. We are an unincorporated area, and very little planning or vision ever took place for these areas.	Thank you for your participation in this public process. The Commenter's support for the Project has been heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR and, therefore, no further response is required.

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		Because of that, and what started out as some hunting cabins, some second homes for families to get out of the city, we now have dirt trails that our fire department can't even get up to to be able to put a fire out on a house. They weren't built for that. There was no vision and no planning. Medical services, there's nothing there 24 hours. There's an ambulance service that will take you off the hill, but that's quite a -- quite a trek. Minimal jobs. Our youth don't really have opportunities. What I've found is when you give people opportunities, they really prosper. Well, our youth don't have opportunities in the areas, so if you want to work at a fast food place, rock on, you got it, plenty of those. But Centennial -- Centennial is a planned, you've heard that many times, we are at the planning department, it's a planned and has vision of what it's going to look like and what it's going to do. For me, I'm very excited for our youth and our young families who want that opportunity to have more jobs and more services medical-wise. So what I say to you: It's going to change lives in our area, and it's going to save lives, not only this generation, but the generations to come. So I love the fact that I live there, I can look up at night, and I can see the stars, and I choose to live there, but there's going to be a time in my life that I'm not going to be able to live there, that I'm going to need a location that's in a city that has the facilities that you and I will all need some day. I hope we all make it that far; right? So thank you very much for your time. I really appreciate it.	

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		I hope I've hit all the points that I want to, and I'm going to let somebody else go next. Thank you.	
Frank Williams			
RPC-53	Support	Well, thank you. And good morning, Chair, and Regional Planning Commission. My name is Frank Williams, and I'm in support to show my support for the Centennial project. I'm a volunteer. I'm glad you brought that up because I'm an advocate of housing and creating wealth through home ownership. And to add Mr. Modugno's credit -- credit, there was a question regarding the seniors, and I just want to let you know that I'm so proud to be a resident of Los Angeles County that we exercise Propositions 60 and 90 that elderly members over 55 can take their property tax base, trended base with them to this new project choo- -- so they choose to move into this project, which is a tremendous asset to a lot of families. And those families that are trying to become home ownership, I'm also proud that you have the unique privilege of changing the path of many generations. By creating wealth through home ownership, you offer -- you offer families the opportunity to provide for other things like education, maybe investing in their own retirement, also maybe investing in a small business. The people that you're helping today are small business owners. They're Angelenos that are looking right now for a house.	Thank you for your participation in this public process. The Commenter's support for the Project has been heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR and, therefore, no further response is required.

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		There are hundreds of families right now that have the ability by today's standards, by today's underwriting standards, the most stringent in my career, and I have more than 28 years of experience in finance, and I could tell you they're looking for a home that they can qualify for by today's underwriting standards, and they cannot find it, and we're talking about just regular families that have regular jobs, regular self-employed people that get up every day that are paying more than 50 percent of their gross income to rent, they're paying rent to corporations that are moving into neighborhoods. And I'm proud that the Centennial project has actually reached out to our organization, The 200, which is a statewide advocacy of creating wealth through home ownership on their concerns over making sure that owner-occupied home ownership is a priority for them and at every level. Many times when projects are designed, they look to try to see what the big picture is, and really what it is is I see this project that was really designed with one family at a time, one family at a time that has an opportunity to buy their own home, that a child can go to their own school, that over the course of their generation know one home and have ability for that family to transfer that wealth from one generation to another. And the fact that this project has sustainable housing and other parks, I mean we cannot even build a park in Los Angeles County right now. I'm going to tell you the fact that they're so generous with the amount of open space and concern for bike path, and as a fellow cyclist, I appreciate the paths that they're doing out there because it also adds to our health and the things that I put on there with regards to health and	

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		improving our environment, of course it's less commuting. Again, thank you. And I just leave with this. If not now, when, and if not here, where? Thank you.	
Candace Huskey			
RPC-54	Support	Good morning. My name is Candace Huskey, and I'm a neighbor of Tejon Ranch. I'm also a registered nurse, and I'm president of a non-profit animal shelter called "Shelter on the Hill." Tejon Ranch has been a great neighbor and supporter of our local mountain communities. Ms. Burnaugh outlined for you the difficulties that our mountain communities Frazier Park, Lebec, Gorman and others have -- have had over the years in trying to provide jobs and job opportunities. For 25 years, I've watched Tejon Ranch invest in our local communities to fund local youth programs and to support animal care and adoption. I first learned of the ten -- Centennial project about 15 years ago, and I have been eagerly awaiting the benefits that it is bound to bring to our mountain communities. The job creation, the health care facilities, retail opportunities, housing and other public benefits are very much needed in our area, and Tejon Ranch has a record of doing things the right way. A personal passion of mine is the rescue of lost and abandoned animals from the streets and finding new homes for them.	Thank you for your participation in this public process. The Commenter's support for the Project has been heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR and, therefore, no further response is required.

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		Many years, there was no place in our area to house lost and abandoned animals. Tejon Ranch was eager to partner with the community and with us to achieve the goal of rescuing local strays. I'm happy to say that because of many people's efforts, and that certainly includes the ranch, we opened a shelter in 2014, and since then, we've adopted out over 700 dogs and cats into new homes. I know Centennial will be a huge benefit to our community, and it will be done with excellence because excellence is what Tejon Ranch does in all its endeavors. I encourage you to recommend approval for the Centennial project and allow us local residents to experience the benefits of this much needed community. Thank you.	
Troy Hooper			
RPC-55	Support	Good morning. My name is Troy Hooper. As Chairman of the Board of the Santa Clarita Valley Chamber of Commerce, I'm here to speak in favor of the Centennial project. The chamber recognizes the need for responsible growth. Centennial will bring 23,000 permanent jobs to the area and a 21 and a half million dollar surplus to the County of Los Angeles.	Thank you for your participation in this public process. The Commenter's support for the Project has been heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR and, therefore, no further response is required.

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		The Los Angeles Economic Development Corporation has studied the Centennial project, and I would like to review a few of the findings. The LAEDC reports that Centennial will generate $3.1 billion in annual total output in -- into L.A. County, 22,470 permanent jobs in L.A. County, $1.4 billion in annual labor income in L.A. County and 471.7 million in annual federal, state and local taxes. These numbers are an astounding boost to L.A. County. In addition, Centennial -- Centennial has been designed in such a way that its residents can live and work in a sustainable, self-contained community, which is desperately needed across L.A. County. Lastly, for Centennial to provide housing and commercial in one area allows for a boost in the local economy because expenditures will be kept internal. Centennial will accommodate sustainable growth throughout the Antelope Valley and L.A. County as a whole. The county's general plan includes Centennial as an appropriate location for growth. We urge you and your department to expedite as quickly -- expedite and quickly move this project through the final stages of approval. Approval for this plan is crucial. Thank you.	

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Wendy Heffernan			
RPC-56	Support	My name is Wendy Heffernan, and I am a native Californian. I have lived in L.A. County for over 60 years. My family grew up starting in the metro L.A. area, and my dad decided to move out to the San Fernando Valley to Granada Hills where he could afford a home. As I got married and decided to start my family, I moved to the master-planned community of Santa Clarita where I've lived for over 20 years, not as long as the Commissioner here, but still enough to be called a long-term resident. I'm here in support of the Centennial project. I have three adult sons. I took the day off work today so I could come talk to you about where are they going to live. They can't afford to live in Santa Clarita. I don't want them to move out of the state and move somewhere else. I'd love them to have a place like Centennial where they can live, they could raise their children, they have access to recreation and access to me so I could be close to them. Important; right? In addition, I work at an over 55 community in Santa Clarita, and I understand the importance of senior housing, and I hope, as this project moves forward to the tentative maps, there is an opportunity to revisit the fact of need for that kind of housing in that community. Conversely, I would look at a -- a community like Centennial, as I downsized from my house now that I have an empty nest, and look at it as a place to live close to my children who may hopefully still stay in	Thank you for your participation in this public process. The Commenter's support for the Project has been heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR and, therefore, no further response is required.

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		California, and as a senior, I won't have to leave California to go find somewhere else to retire, as many of my friends and many retirees are leaving the state to go somewhere else. The importance of a place like Centennial, close to the city, Santa Clarita, and also as part of L.A. County is vital, and I'm here to please ask you to support the project. Growth is important, and it's actually necessary, but well-planned communities with business, recreation and varying kinds of housing are critical going forward. You can't open the paper or listen to the news without hearing about the housing shortage, and Centennial is an option that I think we need to consider, and I hope that you vote to approve the project. Thank you.	
Lisa Ballentine			
RPC-57	Support	Good morning. My name is Lisa Ballentine, and I've lived in the Antelope Valley for over 40 years, I've been a resident of Neenach for over 27 years, so I'm very vested in this project. I was one of the original cabinet -- community cabinet members when Greg came out with his team asking for volunteers in the community for their input, and I figured better to be on the side to give our information on what we would like to see than to oppose it and not have any input at all. So for the past 10 -- over 10 years, I've had big stakes in this because I want to see it prosper. My husband works for L.A. County Fire Department, he's been there for over 30 years, and	Thank you for your participation in this public process. The Commenter's support for the Project has been heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR and, therefore, no further response is required.

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		because of that, we have, at times, been the only medical out there for our neighbors. They knew that, I've gone through a lot of the training to be a call man for the fire department, and so we have gotten the phone call after they've called 911 because the response time for our area is a minimum of 30 minutes. That's if they're not on another call. That's medical. For sheriff's department, it's 40 minutes or longer. So that was most important to me in seeing this project come. You know, to -- to have somebody die in your arms because we don't have anybody coming in enough time, we don't have the emergency services that everybody else has, it is extremely difficult when you know they're your neighbors and your friends. We pay taxes just like everybody else, and we don't have access to the parks, to the library to the schools the way everybody else does. Yes, we choose to -- to live out there. I love it. I raised four girls. I didn't have to worry about the gangs, and they could play in the road, they could -- you know, we hiked, we did all kinds of things, and we didn't have to worry about the problems that the city people did, and to us, that was the advantage of moving out there. You take the good with the bad. This project will bring in so many jobs, not only -- from beginning to end, from the -- the beginning, once -- the building, construction to the shopping centers to the community centers, the -- just the different things. And to see a school close because they can't afford to keep it open any longer, you know, now kids are being bused, and my girls had to get up at 5:00	

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		o'clock in the morning to get on the bus at 5:30 to sit on the bus for an hour and a half. Okay. Well, that's something that we had to do, they understood that, but if we can give that -- a better opportunity to the other families that are moving into this area, housing, I would much rather see that. So Tejon Ranch has always been, you know, very good to us, been an awesome neighbor and been supportive of our community, and I am fully in support of this project, and I appreciate you giving us the time to speak here today. Thank you.	
Tim Piasky			
RPC-58	Support	Good morning. My name's Tim Piasky, and I'm the CEO of the Building and Industry Association Los Angeles/Ventura Chapter. We are home to over 1,000 member companies employing over 100,000 workers. We're the voice of building and development in Los Angeles County. I'm here today to show support for Centennial. It's no secret that our county is in a housing crisis. We need more housing. According to the state and the Southern California Association of Governments, the county housing need for the 2013 to 2021 cycle is 30,199 housing units. Since 2013, the county has permitted a total of 3,149 housing units. This leaves the county more than halfway through their housing need cycle having only permitted 10 percent of their housing need, leaving them 27,050 units short.	Thank you for your participation in this public process. The Commenter's support for the Project has been heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR and, therefore, no further response is required.

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		With over 19,000 price attainable units, and 10 percent of them affordable, Centennial is not only L.A. County's overall housing solution, but its affordable housing solution as well. We also need to do more for the missing middle, those that make too much to qualify for government subsidized affordable housing, but not enough to afford expensive market rate housing. Due to high land and development costs, developers aren't usually able to make this type of housing financially feasible, which is why there have been zero moderate income units permitted in L.A. County since 2013. Centennial would help solve this problem as well since it is designed to bring in young buyers just starting out as well as middle income families who are desperately looking for price attainable housing. It will offer small lot single-family detached residences, single-family and multi-family attached residences, including townhomes, condominiums and apartments. With their multi-modal transportation system encouraging public transportation and walking, Centennial will allow for a family to not only afford their homes, but be able to save on extra expenditures such as multiple vehicles and gas because there will be endless transportation alternatives for them to get from home to work. The BIALAV Chapter urges you to recommend approval and allow Centennial to move forward. We need to finally begin development on this much-needed project. Thank you.	

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Michael Josselyn			
RPC-59	Support	Good morning. My name is Michael Josselyn. I am a principal with environmental consulting firm WRA and also was a professor at San Francisco State University for 20 years as a conservation biologist. I'm here speaking in favor of the specific plan. It's been mentioned about 10 years ago when a ranchwide agreement was signed. It was a great day. Arnold Schwarzenegger was there with Tom -- Bob Stine, and they signed that agreement. But my role in that started five years earlier than that, and that's when the Trust for Public Land engaged me to get involved in trying to find the best conservation lands on Tejon Ranch that could be acquired by the state and also by private foundations. So in that process, I put together a scientific committee. We began looking at the data that's -- exists on the ranch. We spent numerous days out camping on the ranch, looking at it, examining the data that was available and also putting that into a -- really a massive database that we're able to look at a number of scenarios in order to see what lands would be best protected to provide for the future of wildlife and plants that are existing on the ranch and habitats there. So that effort resulted in that 240,000 acres of land to be protected. Much of that did include native grasslands. In fact, 30,000 acres were within those areas, and they were high quality native grasslands. We looked at a lot of places on the ranch and particularly at this Centennial site, and we involved both the scientists on the independent science	Thank you for your participation in this public process. The Commenter's summary of his work done to identify areas of the Project site most suitable for conservation and most suitable for development is noted, was heard by the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration.

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		panel as well as agencies, we walked that portion of the ranch, and we walked other areas too as well that we felt had much more limited resources and really didn't meet the grade, if you will, in terms of the kinds of qualities of habitats that could be protected and should be protected on the ranch, so some of those areas that didn't make the grade then were excluded. You know, given my experience on the ranch, I was asked to then lead a three-year scientific study on the grassland resources at Centennial. I put together another team with Dr. Bruce Pavlik and Dennis Murphy. We went out and looked at the Centennial in a three-year study. We found two important results. First, that the native grasslands on Centennial do vary considerably based on a lot of ecological factors, but not all of those grasslands were valuable areas, and so what we did was to design and propose areas that could be protected, and those areas were included in the preserve areas on Centennial. So I believe that the approach that is being used for the Centennial specific plan represents the best science available for this area. Thank you for your time.	
Armando Flores			
RPC-60	Support	All right. Good morning, Commissioners. My name is Armando Flores, Legislative Affairs Manager with the Valley Industry & Commerce Association, VICA. We represent over 400 businesses and non-profits all across L.A. County.	Thank you for your participation in this public process. The Commenter's support for the Project has been heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR and, therefore, no further response is required.

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		I am here today to urge you to support and to move forward with the Centennial project, an important investment that will alleviate the housing crisis that our county and state continue to face. California has a housing deficit of over 2 million homes, and that number grows every year as production of homes continuously fails to meet demand. This shortage is driving up the cost of homes and apartments, pushing out working and middle class families from our communities and making it difficult for businesses to attract and retain talent. The only way we are going to solve and get out of the housing crisis is by building more, and Tejon Ranch is taking critical steps to address this present issue with the proposed project before you today. It will help accommodate the plan regional population and economic growth in our county. Centennial is a forward-thinking project that will provide over 19,000 homes and generate 23,000 jobs for the County of Los Angeles. As you've heard today, this project is consistent with the Antelope Valley Area Plan. It will transform an underutilized region into a vibrant community and commercial hub while protecting the open space that is unique to the Tejon Ranch area. Centennial will generate 21.5 million in public revenue for the County of Los Angeles and has committed to contributing major infrastructure investments in northern L.A. County, continuing its great synergy with the surrounding counties and communities.	

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		We cannot continue to ignore the need to build more housing. We strongly urge you to support and move forward with this project today. Thank you.	
Victor Lindenheim			
RPC-61	Support	My name is Victor Lindenheim. I'm the executive director of the Golden State Gateway Coalition. We're a non-profit organization based in Santa Clarita focused on improving roadway transportation in north Los Angeles County. Our current priorities including Interstate 5 corridor and the State Route 138, which I'll be talking about. I'm here today to express the coalition's support for a recommendation for approval of the Centennial specific plan project. In 2002, Centennial was a founding member of the Golden State Gateway Coalition. They later helped advance Interstate 5 improvements by voluntarily making a substantial contribution to the cost of environmental studies for the I-5 capacity enhancement project, currently about to go -- or actually underway. Completed and planned improvements to the freeway include truck climbing lanes through the Newhall Pass, 14 miles of carpool lanes, auxiliary lanes, sound walls and widened bridges. It is this type of forward thinking and commitment by the private sector, Centennial and others, in partnership with county and state and local officials, that will result in reduced traffic	Thank you for your participation in this public process. The Commenter's support for the Project has been heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR and, therefore, no further response is required.

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		congestion, safer roads, cleaner air and more efficient freight movement. Current status. Final design on the carpool lanes will be completed this year. Passage of L.A. County Measure M included 200 -- $240 million for construction of I-5 improvement. Just last month, the California Transportation Commission unanimously approved $247 million additional for that project. And just yesterday, a federal grant of $47 million was awarded for chokepoint relief in the I-5 corridor, so these things will be happening. This is a si- -- a significant project that will create thousands of good jobs and improve our quality of life in north county. This is an environmentally cleared, ready-to-go project, and Centennial made it happen -- helped make it happen. Construction's scheduled to begin next year. The Gateway Coalition and Centennial also support the State Route 130 -- 138 corridor improvement project. The planned SR 138 improvements will not only accommodate an anticipated economic growth, but also improve safety and goods movement for critical north county roadway system consisting of Interstate 5, State Route 14 and the planned high desert corridor. Environmental documents for SR 138 have already been approved, and Metro and Caltrans are exploring safety improvements that can be made to this critical route connecting Interstate 5 and the proposed high desert corridor.	

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		Because of its commitment from Centennial to improve transportation for north L.A. County, I can firmly stand in support of this project. I urge that the Regional Planning Commission recommend approval to the board of supervisors for the Centennial project. Thank you.	
Joshua Ginsberg			
RPC-62	Support	Good morning. My name is Joshua Ginsberg, and I am the Director of Economic Development for the Antelope Valley Hispanic Chamber of Commerce, which represents over 20,000 employees of our members' businesses. I come not -- come before you not only on behalf of the chamber, but also as a business owner in the Antelope Valley. I've been a business owner for over a decade, we -- and I represent Digi-VUE Advertising, which is one of the largest advertising firms in the Antelope Valley. As a business owner, the Centennial project is a cru- -- it is crucial to us because we are lacking on the number of rooftops throughout the Antelope Valley. The Antelope Valley, in my opinion, was developed in a very similar scope as the Centennial project. Palmdale-Lancaster started as an agri- -- agricultural community and grew into a full-fledged residential community. As a child, we moved from the L.A. Basin area to Palmdale, and we -- and we grew up in the Antelope Valley, I grew up in the Antelope Valley,	Thank you for your participation in this public process. The Commenter's support for the Project has been heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR and, therefore, no further response is required.

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		went to school in the Antelope Valley, I started a successful business in this community, we also provide jobs in this community and started a family. In light of all the positive things in the Antelope Valley, we have our challenges in our community, which is -- basically comes down to affordable housing and available housing. Over a short period of time, I've seen numerous of the businesses and families that we work with, they've moved either out of L.A. County or into different states because of the housing. It's very important. So we need price attainable homes for our working class families, and we must support our local economy, and I believe Centennial is an answer to -- to make that happen. In conclusion, I would like to say it's important that the County of Los Angeles recognize the needs of a growing economy, and we need to give its residents a fair opportunity, a -- a place to raise a family and also a place to enjoy a better quality of life, and I think, based off the points of what Centennial is offering to us, it -- it definitely would be a good opportunity. So I ask -- I ask for you to recommend approval to the board of supervisors and allow Centennial to begin developing. Thank you.	

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Mark Hemstreet			
RPC-63	Support	It's still morning, so good morning. Thank you all for allowing us to speak today. My name is Mark Hemstreet. I'm the CEO for the Lancaster Chamber of Commerce, so we're not too far from the Centennial project out there. And -- and I am speaking in support of the Centennial project. One of the things that the chamber looks at is -- is building a better community. That's both in -- in making sure that we have affordable housing and employment and resources for our residents. One of my -- we talked -- a lot of people have talked about 19,000-plus houses coming in, 25,000 new jobs for construction, 23,000 permanent jobs. We've talked about that. What we haven't talked about is -- is -- is what I call "smart planning," and that's the ability to come in and build a -- a -- a stand-alone, sustainable community. Now, that community bringing those -- those families into -- into Centennial will definitely impact my area. It will impact my members, my businesses, my community, and I think in a positive way. But one thing that I do really, really support in this project is the concept of building a -- a fully built-out community versus where -- where in Lancaster and many communities throughout California you have a builder, a developer that comes in and builds 50 houses, then you have another developer that builds 50 houses and another developer that builds 50 houses and -- and so on through your	Thank you for your participation in this public process. The Commenter's support for the Project has been heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR and, therefore, no further response is required.

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		community as kind of a patchwork. No one takes responsibility for the whole community. They take responsibility for their 50 houses and their tract, but when it comes to building a school, "I didn't" -- "I don't need to build a school 'cause I'm only building 50 houses," but you put 10 of them together, now you have 500 houses. Now you need schools, but we don't have the -- the resources always to put it together and build it together fast enough. We had one out in our area called "Anaverde," which was a master-planned community which supposed to have a school and -- and facilities built and never -- and it took years for that to happen after the -- after the houses were built, and that's one thing I think that Tejon Ranch can bring to the table is a fully built-out community to start with that I can really appreciate. The Antelope Valley has approximately 70,000 people that commute down the 14 freeway and the 5 freeway and the 405 down to Los Angeles every day. We have a lot of jobs, and we have a lot of -- I mean there -- we -- we could use more jobs up in our area, and this would definitely help us. We also see that we have Northrop, and we have Lockheed, and we have Edwards, but also huge players in our -- in our backyard that people drive to, so I see commuting people from Centennial even to these places too because it's a less -- much less time than they are driving currently. So the chamber's in support of it. I hope you can support it too. Thank you.	

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Sandra Hernandez			
RPC-64	Support	Well, just for the record, Thomas Gonzalez was called. I'm with Thomas Gonzalez. My name is Sandra Hernandez. (Unintelligible). I greeted you in our Kitanemuk language saying "Hello. Good morning. Thank you for having me here today. My name is Sandra Hernandez. I'm from Bakersfield. I'm a member of the Tejon Indian Tribe." I'm here today with Vice Chairman Thomas Gonzalez on behalf of the Tejon Indian Tribe to show our full support of Centennial. We have 904 tribal members indigenous to Kern County, specifically Bakersfield. Tejon Ranch is working with the tribe to continue to assist in advancing the local knowledge and appreciation of our ancestors' contributions, ensuring that the history behind the ranch is not lost. We appreciate Tejon Ranch's openness and cooperative nature. It is through this working relationship that we can say confidently that Tejon Ranch sets their standards high in the projects that they are involved in. From establishing conservation areas to using environmentally sus- -- excuse me, environmentally sensitive practices in ranching, farming and real estate, Tejon Ranch is committed to conservation and preservation of this land. Centennial has been designed to be a sustain -- a sustainable, self-sustained community where	Thank you for your participation in this public process. The Commenter's support for the Project has been heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. For information regarding appropriate AB 52 consultation with Native American tribes, please see Draft EIR, Section 5.6, Cultural and Tribal Resources. This comment does not address the adequacy of the EIR and, therefore, no further response is required.

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		people can live and work without having to commute long distances. Centennial has placed emphasis historically and contemporarily on the protection of open spaces and taken the necessary and significant steps to ensure protection of the biodiversity of the surrounding space. The Tejon Indian tribe, a sovereign Indian nation, is the only federally recognized tribe in Kern County boundaries. Tejon Ranch rests on our tribe's traditional and historical areas, the land our creation story states that we were placed on, the lands our ancestors worked on, lived on and loved, lands that we still love today. The tribe's inclusion to this discussion is integral as our ties to the land is from a time immemorial. The tribe supports Centennial and asks for your recommendation of Centennial and to allow it to move to the next stage. (Unintelligible). Thank you very much for your time.	
RPC-65	Cultural	COMMISSIONER MODUGNO: In looking at your ancestors' usage of the land, and the ranch is huge – SANDRA HERNANDEZ: Huge. COMMISSIONER MODUGNO: -- to the extent to which -- have there been documented -- in terms of ceremonial activities on any of the site that's being impacted, is there a way in which you've worked with -- the tribe has worked with -- with Centennial or Tejon Ranch to not only sort of honor and respect the history, but also in terms of being able to integrate future activities on the site or if any sort of cultural museums are ever built that they	The Commenter is thanked for their participation in this public process, and their response to Commissioners Modugno's and Louie's questions. The Commenter's support for the Project has been heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. For information regarding appropriate AB 52 consultation with Native American tribes, please see Draft EIR, Section 5.6, Cultural and Tribal Resources. This comment does not address the adequacy of the EIR and, therefore, no further response is required.

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		can be used, again, to both honor and -- for future generations to learn the history of the peoples and the land? SANDRA HERNANDEZ: We have had lengthy discussions, informative discussions including all of the items of which you're speaking. The ranch's goal that we are able to continue to educate our community by the land usage and making provisions around the areas that are culturally sensitive as well as bringing the education to the community that's necessary has been ongoing dialogue that we've been, again, just very welcome in the openness that Tejon Ranch has provided with this project specifically. And I would just say anywhere you're digging, building or moving things in California is culturally sensitive regard (unintelligible) – COMMISSIONER MODUGNO: Oh, I understand that – SANDRA HERNANDEZ: Yeah. COMMISSIONER MODUGNO: -- but -- but the extent to which, again, the importance to the tribe and -- and to your people, in terms of that, they're -- they're working closely with you, and you're satisfied with your relationship. SANDRA HERNANDEZ: Yes, we are very satisfied – COMMISSIONER MODUGNO: Great. Thank you. SANDRA HERNANDEZ: -- with that, and they are culturally sensitive areas. COMMISSIONER MODUGNO: Thank you. CHAIR LOUIE: And -- and just for clarity, so beyond talking with you, recognizing, has there been any	

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		effort to capture the -- the history, the cultural importance of your tribe? Is there something that is going to be constructed, a memorial? SANDRA HERNANDEZ: So maybe just for a little bit of historical reference, our tribe was federally reaffirmed in January of 2012. We are considered a very new tribe. We were reaffirmed by the federal government and are in essentially the very beginning stages of developing our very new nation and what that looks like for us internally as tribal people and externally in our community what that means, that knowledge piece that Tejon Ranch and ourselves as a tribe have begun dialogue in is definitely moving towards these markers of knowledge for the space that's occupied by the community and Tejon Ranch right now.	
Ron Bruns			
RPC-66	Support	Good morning, Commissioners. My name is Ron Bruns. And I'm in support of the Centennial project. My ranch is located next to the Tejon Ranch in the Antelope Valley. And I first became exposed to the Antelope Valley as a teenager, which was a long time ago, and my -- on my uncle's ranch in the Antelope Valley, and I have watched the increase in traffic and the unmitigated growth, both legal and illegal, in the Antelope Valley for years. My term for it is "rural sprawl." We all know the term "urban sprawl," but in the Antelope Valley, what I've seen in my life is nothing but rural sprawl. And I'm here to talk about water and to support a project that's going to help to mitigate that rural sprawl.	Thank you for your participation in this public process. The Commenter's support for the Project has been heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR and, therefore, no further response is required.

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		Centennial has developed a water plan that fully exceeds the requirements of the state and provides a sustainable supply of water under normal, dry and multiple dry year conditions. This will be done without the impact of existing water supplies to others as well as myself 'cause like I said, my fence and their fence are the same fence. The water controlled by Tejon was previously used for agriculture, but will now be used for Centennial. Centennial will be a wi- -- is -- is -- also will be wise in its water use, focusing on conservation, use of recycled water primarily for landscape and irrigation, storm water capture. Their plan also includes water banks so -- so that the supply of water during rainy times can be stored for -- for use during drier times. And lastly, Centennial will be responsible for building water systems, including water and -- potable water and sewage treatment plants to storage tanks, distribution lines and at no cost to the county residents in the Antelope Valley. I'm happy to say that I'm a supporter of the Centennial project, and I urge approval of this project and -- and -- because it does help to mitigate urb- -- or rural sprawl, and that's my biggest concern 'cause I just see it going on continuously unmitigated, and that includes traffic as well as housing, and it is, in many situations, inappropriate. Thank you very much.	

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Tony Mize			
RPC-67	Support	Mr. Chairman, Mr. Vice Chairman, members of the Commission, staff, my name is Tony Mize, M-i-z-e, and I'm a vice president with National Community Renaissance. We're a 25-year-old national non-profit organization based in Southern California. We currently own and operate about 9,000 units of affordable housing and within that portfolio about 85 properties with mixed income, affordable to extremely low, moderate income, some market rate, much seniors, much special needs populations, so we have our arms around what the affordable housing aspect of Tejon Ranch is all about, and we're here to speak in favor of the specific plan and moving it forward. National CORE has -- has worked with dozens of communities throughout Southern California, and we -- we work on the -- the nuances that were described earlier about what happens when and, you know, how do we move forward on the affordability components, those sorts of things. We work with cities, we have our own internal planning department, and we have done specific plans ourselves, so we're well versed in how this is all supposed to work and -- so we're in -- we're someone out there who -- who knows about those sorts of things, but what we mostly do is house well over 25- to 30,000 people typically in a better quality of life than they have ever experienced to date in their lives. And the crisis that we're facing now, you all know about it, you all read about it, but more than reading about it, you see it in every community you go into, no matter where it is, we are -- we are so horribly short of housing in Southern California that the kinds of things that are happening that	Thank you for your participation in this public process. The Commenter's support for the Project has been heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR and, therefore, no further response is required.

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		aren't really being surfaced and discussed as much as they should be when you can't move up, down or sideways, when you are anything but the most advantaged people in the population, it's a disaster. It's a disaster for the health care and education of our children. It's a disaster for so many reasons. And one of the other things it's doing, and I understand the -- the gentleman's comment about urban sprawl -- or rural sprawl versus what this is. This is incredibly well planned. This is -- I'll -- I'll mention a word, I hope it's okay, this is what Irvine was doing decades ago. You're planning way out in the future, and I think it's -- I think it's fabulous. The -- the thing that's happening everywhere else is the housing stock is deteriorating dramatically, and unless and until we really start producing housing, we're in for a catastrophe if you think the homelessness issues are bad now. The red light is on. I'll stop. Thank you.	
RPC-68	Miscellaneous	CHAIR LOUIE: Thank you very much. You -- you know, in the spectrum of your practice, do you do any work with homeless emergency housing? TONY MIZE: I have to say, Mr. Chairman, I am up here to do this, but today, right now, starting last night and through tomorrow at the Bonaventure is 1,200 professionals and practitioners of permanent supported housing and from all over the country, about half of them from California, the rest from the rest of the country. I'm supposed to be there, but this is so critical, so I am here.	The Commenter is thanked for their participation in this public process, and their response to Commissioner Modugno's question. The County notes that the Commenter has not been selected as a provider of services to the Project. This testimony does not address the adequacy of the EIR, and no further response is required.

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		Yes, we -- we do -- we do it from the mansion on the hill to the tiny homes community for the formerly homeless. CHAIR LOUIE: So how do you approach emergency homeless housing? TONY MIZE: The -- you know, it is one component of the homelessness issues, and there are, quote, "federal definitions" that require certain handling of how that's done, but there are a lot of non-federal where we -- we have rapid rehousing, we have lots of local jurisdiction-type solutions that can help someone transitionally, that -- that money, for the most part, has gone away federally, but whether -- you know, we're all working towards being able to help someone right off of the street right into a home, that is happening in some places to some levels, and we're working on ways to make that happen sooner, but the -- from the street to the transition -- or to the shelter to some transitional housing to permanent supportive housing, whether the federal definition or other definitions, it's all a collaborative effort, and it involves the government, the non-profit organizations and the communities most of all. CHAIR LOUIE: So for emergency homeless housing, are you placing those folks into apartments, or are you placing them into trailers? Are you placing them into – TONY MIZE: As I say, we – CHAIR LOUIE: -- tents? Modules? TONY MIZE: -- we work in five Southern California counties and about 30 cities, and it's -- everybody's approaching it many different ways. That is one of the ways, but it depends on what the jurisdiction has the appetite and resources for.	

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		CHAIR LOUIE: Okay. Thank you. COMMISSIONER SMITH: Mr. Chair, if I could ask a -- a quick follow-up question, if that's okay? And I know we have many other folks to -- that we want to hear from, so I'll try to be quick. But I am curious. Your portfolio of units across the region, would you say -- are most of them subject to a covenant term and, you know, are you looking at typically a 55-year term, do you do in perpetuity, and what happens when units that are covered by a term come up upon that expiration date, what kind of processes do you have in place? TONY MIZE: When affordable housing started out when I got into it 30 years ago or so, it was 15 years – COMMISSIONER SMITH: Right. TONY MIZE: -- and it was a HUD 15-year deal. State law now requires rental housing to be restricted 55 years and for sale housing 45 years, and there's lots of latitude on how you do what you do in that regard, and thus, those are the relationships between the providers and the jurisdictions to document all that. But we -- the -- the tax credit program, for example, is designed to turn over rental units about every 15 to 17 years with, you know, full rehabs and kind of start them over. We view them as a integral piece of infrastructure. The truly affordable, deeply affordable units are no different than our roads or schools or hospitals. You've got to have them. You've got to have them for the people that serve us.	

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		So you know, it -- it's -- it's a -- there's no one solution. There are 1,000 solutions, and we've got to do them all. We'll never dig our way out of this unless we – COMMISSIONER SMITH: Right. TONY MIZE: -- start viewing it that way. And this is a perfect example of making a dent rather than a scratch.	
Charlie Weiss			
RPC-69	Support	Mr. Chair, Mr. Vice Chair, Commissioners, I'm Charlie Weiss, and I'm Executive Vice President of California Resources Corporation. And I'm very pleased to be here today in support of the cen- -- Centennial project. Our company's proudly headquartered in Los Angeles County, and we employ over 1,000 employees and contractors here, so the availability and affordability of housing is critical to all of us and our families. And like some of the other speakers, I really want my daughters to be able to afford to live in Los Angeles County, and that requires a balance of both jobs and housing. My company has partnered with Tejon Ranch on other projects. We're not involved in this project, but we've seen firsthand their commitment to responsible development. We've also worked closely with Tejon Ranch to promote regional solutions with the Southern California Leadership Council and with Biz Feds,	Thank you for your participation in this public process. The Commenter's support for the Project has been heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR and, therefore, no further response is required.

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		both Los Angeles and Central Valley chapters, as well as in specific conservation projects and numerous charitable activities. And in -- in my view, the Centennial project is going to bring, as we've heard today and as reflected in the reports that you have, much needed, really urgently needed housing, 23,000 local jobs, millions of dollars in tax revenues for the county and -- and our public services and -- and a sustained push to economic growth for the Antelope Valley and for northern Los Angeles County. So we urge that the -- the Planning Commission recommend approval of this project without delay. Thank you so much for your time and consideration.	
Katherine King			
RPC-70	Introduction	My name is Katherine King. I am the secretary of the TriCounty Watchdogs. We're an environmental group located in the mountain communities where the three counties meet, Ventura, Kern and Los Angeles, and we have members in Gorman, Lebec, and I have a -- one foot in Los Angeles and one foot in Kern County myself. I'm going to basically pay attention here to the FEIR. Even though we didn't have time to read it very carefully, in fact, not all of it, and I don't -- but just certain parts, especially our letter and the comments to our comments, but before I address the responses to our comments, I want to start with the six alternatives described in the CEQA findings.	Thank you for your participation in this public process. The Regional Planning Commission heard this testimony and will consider it. It will also be passed on to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR, and no further response is required.

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RPC-71	Alternatives	Now, since in addition to displacing and disrupting precious plant and an- -- animal habitat, all the alternatives, except A, which is no project, insist on plunking 57,000 thirsty people into 19,000 houses with soil disturbed, spore-releasing yards, we would prefer none of these, but if this committee is determined to choose one, despite the significant and unavoidable impacts, we urge alternative E, for alternative E has a lesser, even if still significant, impact on air, water, grading, open space, visual resources and importantly biological resources, especially the Quail Lake tricolor black bird foraging habitat west of the aqueduct. This is something that's very important to us. We visit Quail Lake all the time. Now, the arguments in the FEIR that are used to dismiss this environment -- environmentally superior alternative are not persuasive.	This comment's general opposition to the Project, and its preference for Alternative E over the other Project alternatives, are noted, have been heard by the Regional Planning Commission, and will be provided to the Board of Supervisors for their consideration. With respect to this comment's concerns regarding Alternative E and its relationship to the Quail Lake and the tricolored blackbird, please see responses to Comments ADD-F.13-2 and ADD-F.13-4.
RPC-72	Alternatives	First, an eight-foot-wide regional trail north of Quail Lake is not necessary. Instead, a trail could easily connect from the northwestern tip of the project to the maintenance road around Quail Lake.	With regard to this comment's concerns regarding the proposed regional trail connection, please see response to Comment ADD-F.13-6.
RPC-73	Alternatives	Second, higher infrastructure costs for parks that are more highly used, that seems an excellent tradeoff. No problem.	With regard to this comment's concerns regarding Alternative E's potential impacts related to park maintenance costs, please see response to Comment ADD-F.13-6.
RPC-74	Alternatives	Finally, if an additional evacuation route is necessary, why not build one somewhere else? The CEQA findings do not seem to address this.	This comment's reference to "an additional evacuation route" is understood to be a reference to Alternative E, which would eliminate the Project's Village Nine, including a proposed bridge crossing the California Aqueduct. An EIR is not required to consider alternatives to a component of a project but should instead focus on alternatives as a whole. (*California Native Plant Soc'y v. City of Santa Cruz* (2009) 177 Cal.App.4th 957, 993.) The Project, as well as Alternatives B, C, and D all assume the construction of a second access bridge over the aqueduct and the EIR thus provides a range of alternatives sufficient for informed decision making. Regarding the adequacy of the range of alternatives analyzed in the EIR, please see Final EIR, responses to Comments F.8-65 and F.8-72.

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RPC-75	Miscellaneous	Now, the responses to our comments, which are inadequate and fail to engage with the environmental crisis – I'm going to run out of time, so I can't give you exactly what the comments were. I'm just going to have to respond.	The Regional Planning Commission heard this testimony and will consider it. It will also be passed on to the Board of Supervisors for consideration. With regard to the Commenter's specific assertions regarding impacts, see Responses to Testimony RPC-76 to RPC-78.
RPC-76	Water Supply	First, water, which is the biggest issue in Southern California, Tejon Ranch Corps has cobbled to- -- cobbled together enough water on paper to last until 2035, but in fact, they don't take into account a 10-year drought. They take into account three-year and five-year, but not 10-year, and that could become the norm, and of course it already is significant and unavoidable.	The Commenter's opinion regarding the reliability of water supply is noted and will be provided to the Regional Planning Commission and Board of Supervisors for consideration. However, the County disagrees and concludes that Project EIR analysis demonstrates reliable and sustainable water supplies, including with regard to the Project's Water Supply Assessment. See Draft EIR, Appendix 5.18-A. As shown on EIR Tables 5.18-10 through 5.18-12, multiple-dry year projections are presented in five-year increments with the first two years shown as normal years and the last three years as a dry period or drought. This data was derived from the peer-reviewed *Centennial Specific Plan Water Supply Assessment* (WSA), which was prepared in accordance with Senate Bill 610 (Water Code § 10910 et seq.) and the California Department of Water Resources' *Guidebook for Implementation of Senate Bill 610 and Senate Bill 221* (DWR Guidebook).[3282] The DWR Guidebook was designed to provide step-by-step instructions for preparing an SB 610 water supply assessment and specifically provides that each water supply assessment should evaluate a multiple-dry year scenario over a five year period with the first two years shown as normal years and the last three years as a dry period.[3283] Thus, the EIR's water supply impact analysis was prepared in accordance with state law and expert agency recommendations and presents a reasonable, good faith disclosure and analysis of the Project's potential impacts on water resources that is appropriately based on an industry-standard analytical approach. That is all that CEQA requires. (*Laurel Heights Improvement Ass'n v. Regents of Univ. of Cal.* (1988) 47 Cal3d 376, 392; *Eureka Citizens for Responsible Gov't v. City of Eureka* (2007) 147 Cal.App. 357, 372.) Despite this comment's implication to the contrary, the EIR's water resources impact analysis is not required to address all variations of the issues or permutations of the data, and a lead agency is not required to conduct every

[3282] Draft EIR Appendix 5.18-A, p. 1-14.
[3283] California Department of Water Resources, Guidebook for Implementation of Senate Bill 610 and Senate Bill 221, pp. iv, 33

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			recommended test and perform all recommended research in evaluating a project's environmental impacts. (*San Joaquin Raptor Rescue Ctr. v. County of Merced* (2007) 149 Cal. App.4th 645, 680; *Gray v. County of Madera* (2008) 167 Cal.App.4th 1099, 1125.) After thorough analysis, the EIR appropriately concludes that Project water supplies will sustainably meet buildout potable and recycled water demands and would in fact maintain an average annual reserve supply in the two Project water banking facilities of more than 79,000 acre-feet after buildout has been achieved. This surplus would persist over time based on an 82-year hydrologic period of record, including single-dry and multiple-dry years, and taking account of potential climate change impacts. With regard to the reliability of imported water supplies for the Project, the potential delivery reliability and variability of Project State Water Project supplies is discussed in Draft EIR Section 5.18, Water Resources, pages 5.18-20 to -28, and -54 to -64. The analysis of Project imported water supplies uses the Early Long Term scenario also used in the California Department of Water Resources' State Water Project Delivery Capability Report, and incorporates the effects of the most severe droughts during the 82-year historical record, plus additional adjustments to account for potential climate change effects and the 5 percent single dry year delivery level used by the Antelope Valley-East Kern Water in the Agency's 2015 Urban Water Management Plan. Consequently, the Draft EIR includes a discussion of State Water Project delivery reliability that is consistent with the conservative Early Long Term scenario developed in the Delivery Capability Report and the same scenario, with a reduced single dry year reliability level, used in the Antelope Valley-East Kern Water Agency's 2015 Urban Water Management Plan. Commenter provides no evidence for its assertion that the Draft EIR analysis is inadequate, and no further response is required. For further discussion of Project water supply analysis, including with regard to drought and climate change, see Final EIR, responses to Comments E.1-5, F.3-4 through F.3-9, F.3A-6, F.3A-9, F.8-213, F.8-214, and F.8-220.
RPC-77	Hazards	And last, I just want to respond specifically, if I may have a couple more seconds, to the valley fever mitigations, so -- we asked for, some of which were accepted or -- in modified way. Number one, hazmat suits for workers should be required, not optional. Spores can be carried home	Please see response to Comment ADD-F.13-10, which proposes revisions to MM 3-2 to further mitigate Project impacts related to Valley Fever and address this comment's concerns regarding Tyvek suits.

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		into other communities, as the research we cited in our comments proves. Second, we disagree that posting signs throughout the -- throughout and adjacent to the project saying "Close windows, valley fever area" would create unreasonable fear. We think it would create reasonable fear. Third, test the soil before you sell a house so that the buyer knows exactly what is in that soil. It can be done.	
RPC-78	Miscellaneous	Fourth, the area needs a hospital, and the comments to our comment -- the responses to our comment said it wasn't needed, and we think it is. Thank you.	The Commenter incorrectly summarizes the County's response to its comments on the Draft EIR. The Commenter appears to be referring to Final EIR, Comment F.3A-67, in which it states that a Level 1 Trauma Hospital is needed near the Project site. In response to this comment, the County explained that the need for a Level I Trauma hospital is dependent on the numbers and types of emergency service needs in the area, and that the Institutional/Civic land use designation of the Project allows for the future development of a hospital/medical center and other public institutional uses of 110 acres of the Project site. Further, Health services (doctor, dentist, and clinics), medical facilities and centers, and medical/dental offices are permitted in areas designated as Commercial, Business Park, Mixed Use, and Institutional/Civic. Urgent care centers are conditionally permitted in these same land use designations. See Final EIR, response to Comment F.3A-67.
Rose Bryan			
RPC-79	Introduction	I am Rose Bryan. I was going to give some of my time to my friend here. But I'm here in regards to the Golden Valley -- Valley Municipal Water District. I am the president of the district and – Okay. The Centennial project will -- will significantly impact the small town and the Golden Valley Municipal Water District because we only have 20 providers.	Thank you for your participation in this public process. Since testifying at this June 6, 2018 hearing, the Commenter has submitted a letter dated July 10, 2018 to the County on behalf of the Golden Valley Municipal Water District (GVMWD), clarifying this testimony. In that letter, the Commenter confirms that the GVMWD Board of Directors (1) approved the Project's Water Supply Assessment on May 18, 2011, and (2) on May 12, 2011, entered into a contractual agreement with the Project applicant to provide the water supply needed to serve the Project. The Commenter's letter clarifies that the GVMWD District Engineer has reviewed the January 4, 2017 Final Memorandum prepared by Kennedy/Jenks Consultants for the "Peer Review of the Water Supply and Demand Assessment for the Proposed Centennial Specific Development" (Draft EIR Appendix 5.18-G), and the February 2017 report by Psomas titled "Potable Water, Wastewater and

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		Now, we've been a very small organization, our district, for a long time, and now I think that it was private for a while, and then it became a -- a non-profit, and now we are all volunteers.	Recycled Water Demand and System Plan" for the Centennial Project and did not identify any concerns for the GVMWD as it relates to the Project's water, wastewater and recycled water infrastructure. Long-term, cumulative regional water supplies are discussed in Draft EIR Section 7.0, Cumulative Impacts, pages 7-26 to 7-28 and in Section 5.18, Water Resources. The Draft EIR found that the Project's water supplies will sustainably meet buildout potable and recycled water demands and would maintain an average annual reserve supply in the two Project water banking facilities of more than 79,000 acre-feet after buildout has been achieved. This surplus would persist over time based on an 82-year hydrologic period of record, including single-dry and multiple-dry years, and taking account of potential climate change impacts, prepared by the California Department of Water Resources in the State Water Project Delivery Capability Report (Draft EIR, Appendix 5.18-C). As discussed in Draft EIR Sections 5.18 and 7.0 the Antelope Valley Area Plan and General Plan EIRs, prepared by the County, the EIRs concluded that current water supplies within the Antelope Valley would be sufficient to meet demand up to 2035 during average water years. The EIRs further noted that available water plans and projections, including the 2013 Antelope Valley Integrated Regional Water Management Plan, indicated that current supplies would not sufficient to meet dry and multiple-dry year demand by 2035. The EIRs also concluded that while potential buildout of the Antelope Valley Area Plan and General Plan in the Antelope Valley region after 2035 could further increase regional water demand, there were no water supply projections extending after 2035. Consequently, the EIRs found that cumulative impacts to regional water supplies would be significant and unavoidable because of the lack of projections for analyzing regional water supply sufficiency after 2035. The Draft EIR determined that the Project would help to reduce the water supply cumulative impact identified in the Antelope Valley Area Plan and General Plan EIRs because it would achieve water use efficiencies above existing average rates in the region and would ensure that the Project-related increment of future regional growth considered in the Antelope Valley Area Plan and General Plan EIRs would occur with a high level of water conservation, including state-of-the art household and irrigation installations and significantly enhanced recycled water use. Nevertheless, consistent with the Antelope Valley Area Plan and General Plan EIRs, the Draft EIR determined that potential cumulative water supply impacts would be significant and unavoidable. Neither the Antelope Valley Area Plan and General Plan EIRs nor the Draft EIR found that there would not be enough

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			water to serve future regional demand. The analyses found that impacts would be significant and unavoidable because of the lack of pertinent information and uncertainty regarding such supplies. Please see response to Comment ADD-D.1-1, which provides a response to the Commenter's July 10, 2018 letter clarifying this testimony.
RPC-80	Miscellaneous	One of the things that was told that I had to pre- -- present to you was the fact that when you've put out the Centennial project, we were never told and we were never given any information on any of the projects or the DEIR or the I - EIR until recently until I told them that I was working with it, so they got very, very upset that they were left out, and yet they are the primary people on the Golden Valley Municipal Water Di- -- District in your documents. So if -- if you're letting the district out of your -- of the loop here, I don't think that's a very good idea because if you're going to annex the project into the Golden Valley Municipal Water District, you're going to have our approval or our, you know, in- -- and information from us as to how we are going to proceed.	Thank you for your participation in this public process. Since testifying at this June 6, 2018 hearing, the Commenter has submitted a letter to the County on behalf of the Golden Valley Municipal Water District (GVMWD), clarifying this testimony. Please see Response to Testimony RPC-79 and response to Comment ADD-D.1-1. As discussed in Response to Testimony RPC-79, on July 10, 2018, the Commenter confirmed that the GVMWD Board of Directors (1) approved the Project's Water Supply Assessment on May 18, 2011, and (2) on May 12, 2011, entered into a contractual agreement with the Project applicant to provide the water supply needed to serve the Project.
RPC-81	Miscellaneous	Now, one of the things that I was told is that -- and -- and they wanted it documented, that the project, if we are going to be -- if you're going to annex the -- the Golden Val- -- the Centennial project into the Golden Valley Municipal Water District, you have to understand that our board needs to be involved in it from the very first. The -- Mr. Springer, which is frankspringer at associates.com, needs to be reached, and he wants to be involved from the very first from the development and also the building and the maps of everything you have if you are going to do that. If they are going to establish their own district, and -- then we're out of the whole thing entirely, but if you are, then you need to know that that is what we're concerned about and what you need to do.	Thank you for your participation in this public process. Since testifying at this June 6, 2018 hearing, the Commenter has submitted a letter to the County on behalf of the Golden Valley Municipal Water District (GVMWD), clarifying this testimony. In that letter, commenter clarified that both the County, and the Local Agency Formation Commission of Los Angeles, must approved the Project and approve expansion of GVMWD's service area boundary before GVMWD can serve as the water purveyor for the Project. Commenter's letter also clarifies that (1) once the Project is included within its service area, GVMWD will provide water supply verifications for future tentative tract maps in compliance with applicable State law, and (2) that GVMWD's District Engineer, and its consultant, Frank Springer, will provide GVMWD standards to the Project, and participate in the development of the Project water, wastewater, and recycled water plans and technical specifications for each phase of the Project, and oversee on behalf of GVMWD the construction of these improvements. Please see Response to Testimony RPC-79 and response to Comment ADD-D.1-1.

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RPC-82	Water Supply	Also, one of the other questions that came up was the project is -- is not following through on the amount of water that you have for 2035. You are now on 2018. This project started in 2002 or '3, and so it's going to run out before the project really is setting up for 2035, so you're going to -- we ask that you maybe possibly add another 20 years to the project, to 2055, because you're going to go at least till that time before it's all done, at least that's from our perspective, so that is something that you need to address and see if that is something you can work out.	Thank you for your participation in this public process. Since testifying at this June 6, 2018 hearing, the Commenter has submitted a letter to the County on behalf of the Golden Valley Municipal Water District, clarifying this testimony. Regarding the Project's long-term impacts on water resources beyond 2035, please see Response to Testimony RPC-79. Please also see response to Comment ADD-D.1-1.
RPC-83	Miscellaneous	Also -- and that -- and you -- and Mr. Springer asked if you would -- had any questions to please contact him at -- at frankspringerand -- andassociates.com. So if you have that information, or if you want more information, I can give you something on it.	Thank you for your participation in this public process. Since testifying at this June 6, 2018 hearing, the Commenter has submitted a letter to the County on behalf of the Golden Valley Municipal Water District, clarifying this testimony. Regarding Mr. Springer's future involvement in the Project, please see Response to Testimony RPC-79. Please also see response to Comment ADD-D.1-1.
RPC-84	Miscellaneous	I said it all -- I just wanted to -- I live in -- I wanted to say one more question. I live in Gorman, and I've been there for 40 years, and I've seen developments come and go, and main -- one of the main things is because of the remoteness of the area, not enough tra- -- roads and peo- -- and animals get killed by the year about all -- by trucks, by cars because there -- there are so many animals that are there that people don't realize are there, and they run down Gorman Post Road, and they get killed, and we then have to deal with that as residents living in Gorman, and that's just one issue. The other issues are water and of course the environment and so forth and so on, but anyway.	Thank you for your participation in this public process. This comment's concerns regarding animal/traffic conflicts in Gorman is noted, was heard by the Regional Planning Commission, and will be provided to the Board of Supervisors for its consideration. This comment does not raise any concerns regarding the adequacy of the EIR and no further response is required. Please see Response to Testimony RPC-79 and response to Comment ADD-D.1-1.
RPC-85	Water Supply	COMMISSIONER SHELL: Thank you.	Thank you for your participation in this public process. Please see Response to Testimony RPC-79 and response to Comment ADD-D.1-1.

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		I -- I'm sorry. What -- did you say you were with the Golden Valley Municipal Water District? ROSE BRYAN: That's right. I run -- I'm the president at this point. COMMISSIONER SHELL: You're the president. So your district is -- would be supplying the majority of the water for the project? ROSE BRYAN: Well, I'm not sure. See, that's the whole point. They had made a -- a document in 2011 saying that they weren't going to provide the water, but somehow, I don't know all the whole -- the whole document or the whole information, they had lawyers doing all of this, and Centennial signed documents as stating -- you might ask Centennial, they have the documents to be able to tell you what exactly they signed, and they were supposed to be part of the Golden Valley Municipal Water District, as I understand, but it's been so many years now that we've got a new board, there's -- everybody is different on there except Mr. Springer, who was the civil engineer during that time, and one other board member. COMMISSIONER SHELL: Okay. So our staff report says the water supply assessment was approved by your water district – ROSE BRYAN: That's right. COMMISSIONER SHELL: -- in May 2011. ROSE BRYAN: That's right. COMMISSIONER SHELL: But you're dis- -- disputing that?	

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		ROSE BRYAN: I'm disputing it because that's what I've heard during the -- the meetings that we have had is that they don't -- not going to provide the water, but if they are, then I think somebody needs to tell the Golden Valley Municipal Water District or contact Mr. Springer to verify all this information because I don't know all the particulars on the contract that they signed in 2011.	
J.P. Rose			
RPC-86	Introduction	Good afternoon, Commissioners. My name is J.P. Rose, and I'm an attorney with the Center for Biological Diversity. I would request one additional minute as I'm representing the organization. Would that be okay? Thank you, Chair. So the center, as you may know, is an environmental group with approximately 1 million members and online activists who I represent today. And today, we are asking you to say "no" to Centennial. Centennial is the wrong vision for Los Angeles County.	Thank you for your participation in this public process. The Regional Planning Commission heard this testimony and will consider it. It will also be passed on to the Board of Supervisors for consideration. The Commenter's opposition is noted. This comment does not address the adequacy of the EIR, and no further response is required.

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RPC-87	Miscellaneous	It will decimate some of California's last native grasslands and wildflower fields while generating -- generating unprecedented traffic and air pollution.	The Commenter's opinion is noted, was heard by the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. The EIR thoroughly analyzes and discloses potential impacts with regard to traffic (Draft EIR Section 5.10), air pollution (Draft EIR Section 5.11), and wildlife (Draft EIR Section 5.7), and has identified all feasible mitigation measures to reduce impacts. Specifically, with regard to grasslands and wildflower fields, please see further discussion in Responses to Testimony RPC-12 and RPC-286.
RPC-88	Traffic	At 35 miles from Santa Clarita and 65 miles from downtown L.A., the vast majority of residents will end up having to have multi-hour commutes to Los Angeles just to get to work, and even by the EIR's optimistic standards, over -- the project would generate over 75,000 external vehicle trips per day with an average trip length of 45 miles, and even these figures are probably lower than they actually are because the EIR assumes that most of the residents will, in fact, find jobs on site, but given the flexibility built into the specific plan and the EIR, the project might be phased as primarily housing first with the commercial development phased or delayed many years later, depending upon market conditions. This will obviously significantly increase the already enormous traffic, air pollution and climate impacts of the project.	The Commenter's opinion is noted, was heard by the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. However, the EIR trip analysis is appropriate under CEQA. As discussed in more detail in Final EIR, response to Comment F.8-23, Draft EIR page 5.10-91 explains that the traffic analysis assumes that a portion of the Project workforce and resident population will live or work outside the Project area and will commute to jobs outside or within the Centennial Specific Plan area. The analysis also assumes that on-site residents and workers will travel for services and amenities outside of the Project. The proportion of internal and external Project area trips was derived from the North County Sub-Area Traffic Model updated by Los Angeles County to reflect the Antelope Valley Area Plan approved by the County in June 2015. The North County Sub-Area Traffic Model used for the Project analysis is the same model used by the County and other public agencies for transportation planning studies in the region, including the 2015 Antelope Valley Area Plan (AVAP) and County General Plan update EIRs. The model was also used by Caltrans in the preparation of the Northwest State Route 138 Corridor Improvement Project Final EIR/EIS. With regard to Project trip length, as discussed on Draft EIR page 5.10-51, the North County Sub-Area Model results show that 40 percent of the trips made on site would be 3 miles or less in length, and nearly 70 percent of all internal trips would be 4 miles or less. As shown on Table 3.8 of the traffic study (Draft EIR Appendix 5.10-A), the North County Sub-Area Model results estimate that, on average, each internal Project trip will be 3.4 miles in length. The model estimates that an average external trip will be 45.9 miles in length. Finally, the North County Sub-Area Model estimates that 48 percent of all trips will be internal and 52 percent of all trips till be external to the Project. Consequently, the average Project trip is estimated to be 25.5 miles in length. As discussed on page 3-9 of Draft EIR Appendix 5.10-A, these estimated trip lengths are conservative because they do not reflect the trip reduction measures being implemented by the Project that will encourage trips by walking, biking, and transit.

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			With regard to Project phasing, although the phasing program may be revised by the Project Applicant/Developer, any such revision is subject to County approval during the tentative tract map (TTM) process required by the Los Angeles County Subdivision Ordinance and the development requirements in the Centennial Specific Plan. (Final EIR Appendix 4.0-A.Rev.) The conceptual phasing program is appropriate under CEQA and provides sufficient detail for impact analysis, as is further discussed in Final EIR, response to Comment F.8-11.
RPC-89	Greenhouse Gas	I'd also like to just quickly address something that I heard from the developers, consultants and attorneys earlier, that the project would be net zero energy. I have reviewed the -- the EIR, and I did not see anything to that effect. In fact, it said impacts to the climate would be significant. So that just simply is not true here.	As part of the Project's proposed development agreement with the County, the Project has committed to achieving a "net zero carbon for the electric sector" standard on all public and private facilities constructed within the Project, which means that carbon emissions created to produce electricity that is consumed within the Specific Plan area will be offset with an equivalent amount of carbon emission reductions that result from quantified greenhouse gas emission reductions as documented over time as part of each application for a tentative tract map.
RPC-90	Traffic	Centennial, instead, will require the expansion of a sleepy two-lane highway into a full-fledged highway.	The Northwest 138 Improvement Project addresses significant existing and reasonably anticipated future needs irrespective of Centennial approval and development. Please see response to Comment ADD-F.10-5 for further discussion.
RPC-91	Biology Sprawl Traffic	This highway development would occur in habitat linkage next to the Angeles National Forest. We are still working here in L.A. County to undo the ecological damage of past freeway and sprawl development that has nearly driven our local mountain lion population to extinction, yet here we are considering whether to prove -- approve a sprawl city that will act as a catalyst for another wildlife-killing freeway in a remote corner of the county. Taxpayers deserve real solutions to the housing shortage, not more sprawl and freeways that only serve the interests of Tejon and its Wall Street investors.	As noted in Response to Testimony RPC-90, the Project is not the catalyst for the Northwest 138 Improvement Project. The County disagrees with Commenter's characterization of the Project, and notes that the Project has been sited and designed to promote regional "smart growth" planning principles established by the Southern California Association of Governments' (SCAG) 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy and the County's Antelope Valley Area Plan (AVAP) for the purpose of accommodating regional growth projections in a sustainable manner that reduces criteria air pollutant and greenhouse gas emissions and promotes public health while protecting regional open space, Sensitive Ecological Areas and agricultural areas consistent with the AVAP's Rural Preservation Strategy. See Final EIR, response to Comment F.8-20 for further discussion.

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RPC-92	Biology	Centennial would also destroy thousands of acres of irreplaceable wildlands. 99 percent of California's native grasslands are already gone forever. I ask you not to put the final nail in the cos- -- coffin for these quintessential California landscapes.	The Commenter's opinion is noted, has been heard by the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. The EIR thoroughly and appropriately documents the grassland study done on the Project site. Draft EIR Section 5.7, Biological Resources, discloses the Project's potential impact to grasslands and determines that direct and indirect impacts would be mitigated to a less than significant level, but cumulative impacts to native grasslands would be a cumulative significant impact. (Draft EIR, pages 5.7-158, -162.) Project implementation would include mitigation at a ratio of at least 2:1 for grasslands, resulting in improved functions and values of grasslands on the Project site, in addition to preservation in perpetuity within the Centennial Mitigation Preserve as described in PDF 7-1 on page 5.7-135 of the Draft EIR. Intensive, multi-year grassland studies have revealed that grasslands of equal or greater value occur in vast quantities in the Mitigation Preserve. Please see Final EIR, responses to Comments B.4-17, B.4-43, B.4-63, F.7-22, F.8-124, F.8-125, F.8-127, F.8-128, and F.8-131 for further discussion of grasslands.
RPC-93	Hazards	There are many other reasons you should say "no" to Centennial. It is in the high and very high fire hazard area. We just experienced one of the worst fire seasons in U.S. history -- in California history. These fires are going to grow more intense in climate change. We shouldn't be putting people in harm's way and extending county services to that area.	The Commenter's opinion is noted, has been heard by the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. With regard to fire, the EIR appropriately evaluates the Project's potential fire safety impacts under two thresholds of significance. First, the Draft EIR considers whether the Project would expose people or structures to a significant risk of loss, injury or death involving fires because it is located (i) within a Very High Fire Hazard Severity Zone (VHFHSZ), (ii) within a high fire hazard area with inadequate access, (iii) within an area with inadequate water and pressure to meet fire flow standards, or (iv) within proximity to land uses that have the potential for dangerous fire hazard. Second, the Draft EIR considers whether the Project constitutes a potentially dangerous fire hazard. The Draft EIR determined that, with implementation of MM 3-9, Project impacts related to fire hazards would be less than significant under both applicable thresholds of significance. The Draft EIR concluded that Project impacts related to fire safety would be less than significant only after taking into consideration (i) Project site access, (ii) Project site water flows, (iii) Project site topography, (iv) Project site vegetative cover, (v) existing and proposed regulatory controls, (vi) existing mutual aid agreements between federal, state, and local fire safety service providers, and (vii) Project improvements and mitigation measures related to landscaping and vegetation management, building construction, circulation, public utilities, and fire protection services, including but not limited to MM 3-9. This testimony does not specifically address the adequacy

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			of the EIR, and no further response is required. For further discussion of fire impacts, see Draft EIR, Section 5.3, and Final EIR, response to Comment A.2-6.
RPC-94	Conclusion	I grew up in California, and I fell in love with the beautiful landscapes and rugged mountains that we have here. In my fairly short life, I have watched pieces of that landscape slip away and disappear forever. We ask you to do the right thing and protect these landscapes for the next generation of Californians. Thank you.	The Regional Planning Commission heard this testimony and will consider it. It will also be passed on to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR, and no further response is required.
Aaron Echols			
RPC-95	Introduction	My name is Aaron Echols, and I'm a professional biologist and photographer, and I've lived in Southern California my entire life. And I'm opposed to this project. I'm opposed, not for it. Most of my sentiments are shared with the Center for Biological Diversity, so I'll -- I'll be brief and -- and save you the -- the redundancy. You're welcome. I -- I will say we are currently sitting right here, although it may not look like it, in one of the original 25 biodiv- -- biodiversity hotspots of the world. Lucky us.	Thank you for your participation in this public process. The Commenter's opposition to the Project has been heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR and, therefore, no further response is required.

Testimony No.	Environmental Topic	Testimony	Response to Testimony
RPC-96	Sprawl Biology	This project proposes massive textbook sprawl development into one of the most biodiverse subregions of the California Floristic Province.	The County disagrees with the Commenter's characterization of the Project, and notes that the Project has been sited and designed to promote regional "smart growth" planning principles established by the Southern California Association of Governments' (SCAG) 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy and the County's Antelope Valley Area Plan (AVAP) for the purpose of accommodating regional growth projections in a sustainable manner that reduces criteria air pollutant and greenhouse gas emissions and promotes public health while protecting regional open space, Sensitive Ecological Areas and agricultural areas consistent with the AVAP's Rural Preservation Strategy. See Final EIR, response to Comment F.8-20 for further discussion. The Commenter is correct that the Project site is located in the California Floristic Province, which has a Mediterranean-type climate located on the Pacific Coast of North America, with a distinctive flora similar to other regions with a winter rainfall and summer drought climate like the Mediterranean Basin. The Project EIR documents specific and exhaustive study of the Project site and the presence of plant species, analyzed potential adverse impacts, and identified all feasible mitigation to reduce such impacts to the greatest extent feasible. This testimony does not address the adequacy of the EIR, and no further response is required.
RPC-97	Biology	The Tejon Ranch should be left fully intact as natural habitat and for an enjoyment and peace of mind of the trillions of people that will exist on this planet after we are gone. It is our privilege and our duty to protect and preserve what little is left of Southern California natural habitat, especially that of such pristine quality.	The Regional Planning Commission heard this testimony and will consider it. It will also be passed on to the Board of Supervisors for consideration. The Commenter's opposition to the Project as proposed is noted. This comment does not address the adequacy of the EIR, and no further response is required.
RPC-98	Conclusion	I'm hearing a lot of appeals on the proponents' side out of selfishness, "I want a house," "I want a contract," "I want business," "I want more convenient shopping," "I want money." I think we should make considerations beyond ourselves and our species and think about the planet and what we would like to leave behind. Thank you.	The Regional Planning Commission heard this testimony and will consider it. It will also be passed on to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR, and no further response is required.

Testimony No.	Environmental Topic	Testimony	Response to Testimony
Steve Hartman			
RPC-99	Introduction	Good morning, Commissioners. My name is Steve Hartman. I'm a volunteer president of the board of the California Native Plant Society. Thank you. A people that values its privileges above its principles soon loses both. Let's see which principles will be valued less than the privilege of land ownership. The Regional Planning Commission will make an historic decision influencing how growth will occur in Los Angeles County for decades to come. Will our future include affordable urban housing that is close to employment, mass transportation and other public services? Or will the Commission take the side of a profit-driven corporation to create a new city on functioning and very valuable native California plant habitat?	The Regional Planning Commission heard this testimony and will consider it. It will also be passed on to the Board of Supervisors for consideration. The Commenter's opposition is noted. This comment does not address the adequacy of the EIR, and no further response is required.
RPC-100	Affordable Housing	The Centennial Specific Plan fails to create the affordable, appropriately cited, environmentally sustainable housing that our county desperately needs. Centennial is a lose-lose project.	The Regional Planning Commission heard this testimony and will consider it. It will also be passed on to the Board of Supervisors for consideration. The Commenter's opposition is noted, but the County disagrees with the Commenter's characterization of the Project. See Final EIR, response to Comment F.8-20 for further discussion. This comment does not address the adequacy of the EIR, and no further response is required.
RPC-101	Biology	It will replace critical functioning habitat for rare plants and animals with a leapfrog development. It will trade one of the last remaining native grassland habitats in California for commutes that average 45 miles one way.	The Commenter's opinion is noted for the record, has been heard by the Regional Planning Commission, and will be provided to the Board of Supervisors. However, the County disagrees. For an in-depth refutation of the assertion that the Project constitutes "leap-frog" or sprawl development, see Final EIR, response to Comment F.8-20. With regard to appropriate EIR analysis of habitat loss, please see Response to Testimony RPC-14. With regard to appropriate EIR analysis of grassland impacts, please see Response to Testimony RPC-12.

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RPC-102	Greenhouse Gas	It will eliminate habitat that sequesters carbon for greenhouse gas emissions.	As this comment correctly notes, the Project would result in the conversion of some vegetative cover that current sequesters carbon, as disclosed and analyzed in Draft EIR Section 5.21, Climate Change (pages 5.21-5 and -50). It should be noted, however, that the Project would plant an estimated 35,123 new trees, as required by the County Tree Planting Ordinance, which would result in an estimated long-term sequestration of 24,867 metric tons of carbon dioxide equivalent, as discussed on Draft EIR page 5.21-83.
RPC-103	Hazards Geology	It will swap essential wildlife corridors for housing directly on the San Andreas Fault and in the face of wind-driven fires, endangering future residents.	The Commenter's opinion was heard by the Regional Planning Commission and will be provided to the Board of Supervisors. The County disagrees with Commenter's characterization of the Project. As disclosed in Draft EIR Section 5.1, Geotechnical, the San Andreas Fault Earthquake Fault Zone and fault line cross the southwestern edge and southernmost point of the Project site, as shown on Draft EIR Exhibit 5.1-2, Geologic Hazards. However, with implementation of PDF 1-1 and compliance with State and County requirements for construction and setbacks, impacts would be less than significant. With regard to fire hazards, please see Response to Testimony RPC-93. With regard to wildlife connectivity and movement, please see Response to Testimony RPC-4. This testimony does not specifically address the adequacy of the EIR, and no further response is required.
RPC-104	Biology	It will trade one of the best remaining seasonal wildflower habitats for a leapfrog development.	The Commenter's opinion was heard by the Regional Planning Commission and will be provided to the Board of Supervisors. The County disagrees with the Commenter's characterization of the Project. After thorough and appropriate analysis, the EIR concludes that Project mitigation measures and the preservation of 14,908 acres of grasslands coupled with long-term management through implementation of the Ranch-wide Management Plan will sufficiently offset and fully mitigate for impacts on wildflower fields associated with the Project. See Draft EIR, Section 5.7, Biological Resources, and Final EIR, responses to Comments B.4-17, B.4-43, F.3A-19, F.8-119, F.8-123 to F.8-125, and H.21-1 for further discussion of potential impacts to and mitigation to address such impacts to wildflower fields. For an in-depth refutation of the assertion that the Project constitutes "leap-frog" or sprawl development, see Final EIR, response to Comment F.8-20.

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RPC-105	Conclusion	We, the California Native Plant Society, recognize the need for additional affordable housing that benefits all residents of Los Angeles County. We also assert that despite this need, you must take each and every proposed development at face value. We need not trade functioning, intact, indeed precious habitat for leapfrog development that will endanger future residents. We urge you to make the right choice for the people of Los Angeles County like you have done dozens of times in the past. Tejon Ranch Corporation and their Wall Street investors will -- will be fine when you vote no on the Centennial Specific Plan. Thank you.	The Commenter's opposition is noted for the record, has been heard by the Regional Planning Commission, and will be provided to the Board of Supervisors. With regard to this comment's concerns regarding "leap-frog" or sprawl development, see Final EIR, response to Comment F.8-20.
Orchid Black			
RPC-106	Introduction	My name is Orchid Black. I -- I'm a volunteer today. I am missing -- I -- I have my own business, and I am missing work, and I care what I eat, so I don't eat when I'm not working. Chairman Louie, Vice Chair Mr. Moon and the Board, I'm -- I'm speaking in opposition to the plan today.	Thank you for your participation in this public process. The Commenter's opposition to the Project has been heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR and, therefore, no further response is required.
RPC-107	Miscellaneous	I would like to mention that there's been 16 years of planning, and then I understand that this is statutorily okay, but 10 days to review an EIR after 16 years seems unnecessarily fast, and -- and it creates the appearance of a rush to judgment.	The Regional Planning Commission heard this testimony and will consider it. It will also be passed on to the Board of Supervisors for consideration. Following testimony on June 6, 2018, the Regional Planning Commission continued the hearing until July 11, 2018, on which date the Regional Planning Commission continued the hearing again until August 29, 2018, allowing more time for consideration. This comment does not address the adequacy of the EIR, and no further response is required.

Testimony No.	Environmental Topic	Testimony	Response to Testimony
RPC-108	Miscellaneous	Earthquake, wind and fire.	With regard to earthquake, wind, and fire, see Responses to Testimony RPC-110 to -115.
RPC-109	Public Services	This project is a beautiful, well-designed project in the wrong place. It is -- it is not even sprawl. It is le-- leapfrog development where we put development far from where the services are.	The Project does not constitute sprawl. Rather, the Project has been situated and designed to promote regional "smart growth" planning principles established by the Southern California Association of Governments (SCAG) 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy and the County's Antelope Valley Area Plan (AVAP) for the purpose of sustainably accommodating regional growth projections in a manner that reduces criteria air pollutant and greenhouse gas emissions and promotes public health while protecting regional open space, Sensitive Ecological Areas and agricultural areas consistent with the AVAP's Rural Preservation Strategy. For further discussion, please see the Final EIR, response to Comment F.8-20.
RPC-110	Geology	And it -- it sits at the junction of two faults? I have heard nothing to say that -- that more rigorous building standards will be used to accommodate the fact of the faults. The county will be responsible when the earthquake comes to clean it up, so we should consider not siting it here.	The Commenter's preference for an alternative location due to fault placement is noted, has been heard by the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. The EIR thoroughly and appropriately analyzes potential Project-related impacts due to fault location. First, it should be noted that the risk for earthquake shaking throughout Southern California is essentially the same, with a reduced risk along the southeastern portion of the State, so the nearness of one or more active faults does not have a direct correlation to risk of a seismic event and the magnitude of the event in a certain area. With regard to the Project site specifically, due to the proximity of both the San Andreas Fault and Garlock Fault to the Project site, a fault research company called Earth Consultants International (ECI) conducted a detailed fault investigation on the Project site and evaluated potential hazards as a result of fault locations in relation to the Project site and planned development areas. See Draft EIR, Appendix 5.1-A. While earthquakes that may occur along the San Andreas Fault Rift Zone are potential generators of significant ground accelerations at the site, foundation systems must be designed to withstand these accelerations, and secondary impacts such as liquefaction may be mitigated by remedial grazing, structural design and foundations or ground improvement techniques; active fault zones can also be mitigated against by implementing setback zones from Alquist-Priolo Earthquake Fault Zones. Accordingly, as shown on Draft EIR Exhibit 5.1-2, the Project has been designed to avoid development in areas near this zone. (Draft EIR, Section 5.1, Geotechnical, page 5.1-16.) The Project shall incorporate all applicable geotechnical recommendations identified in the geotechnical documents previously prepared for the Project, and implementation of these requirements would ensure impacts would be less than significant. For further discussion

Testimony No.	Environmental Topic	Testimony	Response to Testimony
			regarding seismic impacts and faults, see Final EIR, responses to Comments F.8-206 to F.8-210.
RPC-111	Hazards	It's -- we also have wind and fire. Most of our big fires are wind-driven events. If you look at them from space, there's just these huge trails during the Santa Ana winds from all the fires in Southern California. I recommend that you look for that.	The EIR recognizes that the Project site sometimes experiences high wind events. (Draft EIR, pages 5.11-23, 5.3-17.) This testimony does not address the adequacy of the EIR, and no further response is required.
RPC-112	Miscellaneous	This site is always windy. I've been to it several times, and any time pressure changes in either the San Joaquin or the Antelope Valley, this is where the wind goes through.	The EIR recognizes that the Project site sometimes experiences high wind events. (Draft EIR, pages 5.11-23, 5.3-17.) This testimony does not address the adequacy of the EIR, and no further response is required.
RPC-113	Hazards	And we haven't had fires there why? Because no ignitions. We're going to put 57,000 people there, we're going to have ignitions, and those fires are going to be wind driven, and the county is going to be responsible to deal with that catastrophe.	With regard to fire, the EIR appropriately evaluates the Project's potential fire safety impacts under two thresholds of significance. First, the Draft EIR considers whether the Project would expose people or structures to a significant risk of loss, injury or death involving fires because it is located (i) within a Very High Fire Hazard Severity Zone (VHFHSZ), (ii) within a high fire hazard area with inadequate access, (iii) within an area with inadequate water and pressure to meet fire flow standards, or (iv) within proximity to land uses that have the potential for dangerous fire hazard. Second, the Draft EIR considers whether the Project constitutes a potentially dangerous fire hazard. The Draft EIR determined that, with implementation of MM 3-9, Project impacts related to fire hazards would be less than significant under both applicable thresholds of significance. The Draft EIR concluded that Project impacts related to fire safety would be less than significant only after taking into consideration (i) Project site access, (ii) Project site water flows, (iii) Project site topography, (iv) Project site vegetative cover, (v) existing and proposed regulatory controls, (vi) existing mutual aid agreements between federal, state, and local fire safety service providers, and (vii) Project improvements and mitigation measures related to landscaping and vegetation management, building construction, circulation, public utilities, and fire protection services, including but not limited to MM 3-9. This testimony does not specifically address the adequacy of the EIR, and no further response is required. For further discussion of fire impacts, see Draft EIR, Section 5.3, and Final EIR, response to Comment A.2-6.
RPC-114	Miscellaneous	So that's catastrophe one, earthquake. Catastrophe two, the wind and fire.	With regard to wind, see Response to Testimony RPC-112, and with regard to fire, see Response to Testimony RPC-113.

Testimony No.	Environmental Topic	Testimony	Response to Testimony
RPC-115	Miscellaneous	Wind is also something that just makes people irritable, so you'll have people who have their dream home, but they're irritable all the time. Yeah. So earthquake, wind and fire.	As noted in Response to Testimony RPC-112, the EIR recognizes that the Project site sometimes experiences high wind events. The Commenter's opinion that this will have a widespread effect on residents' behavior, and the Commenter's overall opposition to the Project, has been heard by the Regional Planning Commission and Board of Supervisors. This testimony does not address the adequacy of the EIR, and no further response is required.
RPC-116	Traffic	We have our 75,000 vehicle trips, and we're going to have trips both ways. Everybody who lives there isn't going to work there and take their bicycle. It's a great vision. It belongs closer to Los Angeles. That vision, that great transportation vision, this -- this vision is going to be -- even people who live in the urban areas, somebody talked about his 382 workers, are always driving, and we're going to put in a small town over there, and those people are going to be always driving. His workers are going to have temporary work, and then 23,000 -- let's say 3,000 people get jobs there that work -- that live there. 20,000 trips up the 5 and the 138, and 75,000 down and back? That's, you know, almost 100,000 car trips per day. That's too many. That's too much greenhouse gas for us. That's not appropriate for here. The lands are sensitive --	This comment's opposition to the Project's location is noted, was heard by the Regional Planning Commission, and will be provided to the Board of Supervisors for their consideration. For a detailed discussion regarding the Project's consistency with long-term regional planning documents designed to achieve regional greenhouse gas reductions in the land use sector, please see Final EIR, response to Comment F.8-20. Indeed, the South Coast Air Quality Management District (SCAQMD) has reviewed the Centennial EIR and determined that the Project's Centennial Specific Plan "exemplifies [the County's] leadership in promoting sustainable communities development" and "will help reduce emissions from mobile sources, protect the public health from air pollution, and achieve healthful air in the [South Coast Air] Basin" (see Final EIR, Comment D.4-2). With regards to the number of average daily trips generated by the Project, the North County Sub-Area Model provides an estimate of the Projects average daily trips. As shown on Draft EIR Table 5.10-19, the model projects that about 48 percent of the Project's average daily trips (i.e., 70,246 trips) will be internal to the Project site, while about 52 percent (i.e., 75,908 trips) will be external to the Project site. Thus, as this comment correctly notes, not everybody who lives on the Project site will work on the Project site, and not all Project residents will commute to work by bicycle.
RPC-117	Biology	It's -- it's in the wrong place. The landscape is a sensitive landscape. It has many rare, fragile plants, it has rare birds, it has rare mammals, and they only can exist there because of the -- the immense area of this space, and when we reduce that area and put 100,000 people out there, they won't exist anymore. Thank you.	The Commenter's opposition to the Project and opinion regarding impacts on biological resources is noted, was heard by the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. The EIR appropriately analyzes and mitigates potential Project-related impacts to biological resources to the greatest extent feasible, and the Project Applicant has committed to preserving much of Tejon Ranch for the benefit of species and habitat conservation. This comment does not specifically address the adequacy of the EIR and, therefore, no further response is required.

Testimony No.	Environmental Topic	Testimony	Response to Testimony
Christopher Hanson			
RPC-118	Introduction	Hi. I'm Christopher Hanson. I come to you as a retired 911 EMT from Santa Monica as well as an outdoor trip leader from University of California at Riverside, and I studied sociology. I understand that this will bring economic growth, but I ask the question: At what cost? The lady from Lancaster who we heard from this morning, her environmental opposition to the project doesn't really get at why it's such a big deal.	Thank you for your participation in this public process. These comments will be provided to the Regional Planning Commission and Board of Supervisors for consideration. This comment does not address the adequacy of the EIR, and no further response is required.
RPC-119	Biology	People forget why biological diversity is so important, and I'd like to remind you that it's nature that acts as the lungs for our planet and helps clean the air and helps give us good breathing air.	The Regional Planning Commission heard this testimony and will consider it. It will also be passed on to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR, and no further response is required.
RPC-120	Air Quality Public Health	And something that just came out in 2017, which is quite relevant to me, is the impact on air quality for our brains. Alzheimer's is becoming a very big deal now, and our older generation is suffering, and sciencemag.org, as well as the L.A. Times, published an article saying that they're now realizing that the air quality is affecting our brains, and our neuroge-- neurodegenerative diseases are becoming more and more prevalent. So I would propose that as research is just beginning to come out to show the effects of air quality on our aging population that we at least let these studies kind of gain a little bit more traction before we decide that "Yes, let's do this thing" that I've seen to be irreplaceable as I've led outdoor trips for lots of different international people. Like,	The Regional Planning Commission heard this testimony and will consider it. It will also be passed on to the Board of Supervisors for consideration. With regard to this comment's concerns regarding the Project's potential air quality impacts and their effects on human health, this potential impact was analyzed in the EIR. As explained on Draft EIR pages 5.11-9 and 5.11-10, toxic air contaminants (TACs) are those air pollutants that are known or suspected to cause cancer or other serious health effects (e.g., reproductive effects or birth defects). With respect to the Project's potential to expose sensitive receptors (e.g., residences, schools, day care facilities, hospitals) to substantial pollution concentrations, the Draft EIR determined that this impact would be less than significant with implementation of MM 11-2. With respect to TAC emissions associated with the Project's proposed on-site stationary sources, the Draft EIR determined that impacts from these sources would be less than the incremental cancer risk of and non-cancer health index thresholds with implementation of MMs 11-1, 11-7, 11-8, and 11-9 and, therefore, this impact would be less than significant.

Testimony No.	Environmental Topic	Testimony	Response to Testimony
		they come to California for the nature. They don't come for residential areas. They come to, like, explore Yosemite and Santa Monica beach, like, the -- that's why they are driven here.	
RPC-121	Biology	And so I would offer that we don't be so quick to make a decision to develop on a land that won't be able to be replaced. It takes so long to build these kind of grasslands just from, like, an environmental standpoint. The soil does not replenish itself in matters of tens of years.	The Regional Planning Commission heard this testimony and will consider it. It will also be passed on to the Board of Supervisors for consideration. The Commenter's opposition to the Project is noted. This comment does not address the adequacy of the EIR, and no further response is required.
RPC-122	Conclusion	And so at least give yourself some time and perhaps push this out a little bit to really consider all the ramifications, especially those health and -- ramifications such as Alzheimer's and the connection to air quality that will get worse if we take away natural habitat and replace it with emissions. Thank you.	The Regional Planning Commission heard this testimony and will consider it. It will also be passed on to the Board of Supervisors for consideration. Following testimony on June 6, 2018, the Regional Planning Commission continued the hearing until July 11, 2018, on which date the Regional Planning Commission continued the hearing again until August 29, 2018, allowing more time for consideration. This comment does not address the adequacy of the EIR, and no further response is required.
Bryn Lindblad			
RPC-123	Introduction	Hi. Good afternoon. I'm Bryn Lindblad, Associate Director of Climate Resolve. We're a local organization focused on solutions to climate change. I head up our transportation and land use work, and I would just like to express my strong opposition to this type of -- of sprawl development. I'd urge you to -- to put the brakes on this ill-conceived idea and encourage you to -- must have the courage to really pull the plug on it altogether. But it's -- it's -- it's exactly the wrong sort of development for our region.	Thank you for your participation in this public process. The Commenter's opinion is noted, was heard by the Regional Planning Commission, and will be provided to the Board of Supervisors. However, the Project does not constitute sprawl, and provides development on a site planned to accommodate projected growth in a manner consistent with regional strategies for achieving mandatory reductions in greenhouse gas (GHG) emissions attributable to the land use sector. The Project has been sited and designed to promote regional "smart growth" planning principles established by the Southern California Association of Governments' (SCAG) 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy and the County's Antelope Valley Area Plan (AVAP) for the purpose of accommodating regional growth projections in a sustainable manner that reduces criteria air pollutant and GHG emissions and promotes public health while protecting regional open space, Sensitive Ecological Areas and agricultural areas consistent with the AVAP's Rural Preservation Strategy. See Final EIR, response to Comment F.8-20 for further discussion.

Testimony No.	Environmental Topic	Testimony	Response to Testimony
RPC-124	Sprawl Traffic	It's -- it's this sort of sprawl development that -- that perpetuates car dependence and is sure to worsen congestion on our already traffic-filled roads and not to mention the climate pollution that comes from that.	The Commenter's opinion is noted, was heard by the Regional Planning Commission, and will be provided to the Board of Supervisors. Please see Response to Testimony RPC-123.
RPC-125	Pop/Housing	This -- this project claims to have a jobs-housing balance, but I call serious doubt to that feasibility of it really playing out that way. The reality now in north L.A. County is that it's experienced significantly more growth in housing than it has in jobs, almost twice as much, and there's a real -- a real jobs deficit -- deficit -- deficit, and I have -- I have every reason to believe that that pattern would hold true for this sprawl development as well. Employers don't want to be located 45 miles away from other businesses, and -- and if approved, this -- this massive housing development would not be one where everyone is able -- is ever -- is working there on site, and there would be significant out commuting, and with that, massive amounts of new, long car trips.	This comment's opinion regarding the Project's projected job/housing ratio is noted, was heard by the Regional Planning Commission, and will be provided to the Board of Supervisors for their consideration. The Project's land use plan would provide an estimated jobs/housing ratio of 1.22 through the development of commercial and business park uses on the site, thus positively contributing to the attainment of the Antelope Valley Area Plan's targeted 1.3 jobs-to-housing ratio. With regard to this comment's concerns regarding the EIR's job growth assumptions, as explained in Draft EIR Section 5.9.3 (pages 5.9-18 through 5.9-22, 5.9-29, and 5.9-30), such assumptions are based on regional employment growth projections published by the Southern California Association of Governments (SCAG), which SCAG adopted as part of its 2012 and 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) planning documents. As shown on Draft EIR Table 5.10-19, it is projected that about 48 percent of the Project's average daily trips will be internal to the Project site, while about 52 percent will be external to the Project site. Thus, as this comment correctly notes, not everybody who lives on the Project site will work on the Project site. With regard to this comment's concerns regarding the length of Project trips, as discussed on Draft EIR page 5.10-51, the North County Sub-Area Model project's that 40 percent of the trips made on site would be 3 miles or less in length, and nearly 70 percent of all internal trips would be 4 miles or less. The model estimates that an average external trip will be 45.9 miles in length, and that the average Project trip is estimated to be 25.5 miles in length.
RPC-126	Traffic	This -- this part of our region is also -- north L.A. County is -- is where the longest commutes are already happening, and our congested roads just really cannot accommodate that sort of car dependence, long commutes. Not to mention, this project doesn't include any transit access whatsoever, and there's really -- there's just something -- something missing there connecting people in a way that's sustainable.	The Commenter's opinion has been heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. With regard to transit, among other requirements, the MMRP and Specific Plan require the Project Master Developer to establish a Transportation Management Association (TMA) to develop linkages with other Antelope Valley/Santa Clara Valley TMAs or like organizations in order to maximize transit efficiencies and services. Please see Final EIR, Appendix 4.0-A.Rev for further details. Please see also Responses to Testimony RPC-127 and -128 with regard to smart growth.

Testimony No.	Environmental Topic	Testimony	Response to Testimony
RPC-127	Affordable Housing	I think we can't be giving up on -- on smart growth, by which I mean trying to preserve and create affordable housing near where people can work. They can get around without a car.	The Project has been sited and designed to promote regional "smart growth" planning principles established by the Southern California Association of Governments' (SCAG) 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy and the County's Antelope Valley Area Plan (AVAP) for the purpose of accommodating regional growth projections in a sustainable manner that reduces criteria air pollutant and greenhouse gas emissions and promotes public health while protecting regional open space, Sensitive Ecological Areas and agricultural areas consistent with the AVAP's Rural Preservation Strategy. See Final EIR, response to Comment F.8-20 for further discussion.
RPC-128	Miscellaneous	And -- and I -- I don't think you guys can be fooled into -- into thinking that we can call this project infill.	The Project site is not an infill site. However, it provides development on a site planned to accommodate projected growth in a manner consistent with regional strategies for achieving mandatory reductions in GHG emissions attributable to the land use sector. See Response to Testimony RPC-127 for further details.
RPC-129	Greenhouse Gas Traffic	So as you -- as you probably know, transportation is our largest source of greenhouse gases. What you may not know is that our regional transportation plan, sustainable community strategy and the collection of statewide regional plans doesn't set us upon a path to meet our state climate goals. The reason why is that -- that rich, powerful greenfield developers hire lobbyists to infiltrate those regional planning processes and make sure that their sprawl development project is in those plans.	As discussed in detail in Final EIR, response to Comment F.8-20, SB 375 tasks CARB with calculating per capita GHG emissions reduction targets for each of the regional MPOs.[3284] Each MPO must then adopt an SCS that describes a regional development pattern and transportation network that, if implemented, will feasibly reduce VMT in an amount sufficient to achieve the regional GHG reduction target.[3285] The SCS is adopted as a component of each MPO's federally mandated Regional Transportation Plan (RTP). By law, every SCS must accommodate the region's projected population growth over a 20-year period, as well as an 8-year projection of the regional housing need, as determined through the RHNA process.[3286] In 2010, CARB set the current GHG reduction target for the SCAG region at 8 percent below 2005 per capita emissions levels by 2020, and 13 percent below 2005 per capita emissions levels by 2035.[3287] Shortly thereafter, SCAG, its member agencies, and regional stakeholders engaged in a public process to prepare the region's first SCS. In order to weigh relative costs and benefits, the 2012 RTP/SCS working group evaluated four regional development patterns that would be capable of achieving the region's GHG reduction target while also accommodating future growth projections and housing

[3284] Government Code § 65080
[3285] Ibid.
[3286] Ibid.
[3287] Southern California Association of Governments (SCAG). 2016a (April 7). The 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy. A Plan for Mobility, Accessibility, Sustainability and a High Quality of Life. Los Angeles, CA: SCAG. http://scagrtpscs.net/Documents/2016/final/f2016RTPSCS.pdf.

Testimony No.	Environmental Topic	Testimony	Response to Testimony
			needs.[3288] The land use scenarios varied with respect to the mix of location (e.g., greenfield development vs. infill development), housing type (e.g., single-family versus multifamily), and transportation investments (e.g., roadway versus transit improvements).[3289] These different land use scenarios were developed to explore their relative merits and they informed the project alternatives evaluated in the environmental impact report that SCAG prepared for the 2012 RTP/SCS (2012 RTP/SCS EIR).[3290] In June 2012, CARB certified that implementation of the 2012 RTP/SCS would achieve and exceed the 2020 and 2035 GHG reduction targets applicable to the SCAG region.[3291,3292] That same month, the Federal Highway Administration and the Federal Transit Administration, in consultation with the U.S. Environmental Protection Agency (USEPA), CARB and the regional air quality management districts, determined that the 2012 RTP/SCS was in conformance with the applicable State Implementation Plan (SIP) prepared in accordance with the Clean Air Act to establish control measures necessary to achieve attainment of National Ambient Air Quality Standards (NAAQS) in the SCAG region.[3293,3294] Accordingly, all federal and state expert agencies with regulatory jurisdiction over air resources in the SCAG region have determined that, if implemented, the 2012 RTP/SCS would achieve targeted per capita GHG emissions reductions from passenger vehicles and will not impede or conflict with regional efforts to reduce criteria air pollutants to acceptable levels. As required by SB 375, in April 2016, SCAG updated 2012 RTP/SCS with its adoption of the 2016-2040 Regional Transportation Plan/Sustainable

[3288] Southern California Association of Governments (SCAG). 2012a. (April). 2012-2035 Regional Transportation Plan (p. 114). Los Angeles, CA: SCAG. http://rtpscs.scag.ca.gov/Documents/2012/final/f2012RTPSCS.pdf.

[3289] *Id.*, p. 117

[3290] Ibid.

[3291] California, State of, California Air Resources Board (CARB). 2012. Executive Order G-12-039 Southern California Association of Governments (SCAG) Sustainable Communities Strategy (SCS) ARB Acceptance of GHG Quantification Determination. Sacramento, CA: CARB. https://www.arb.ca.gov/cc/sb375/exec_order_scag_scs.pdf.

[3292] California, State of, California Air Resources Board (CARB). 2012b (May). Technical Evaluation of the Greenhouse Gas Emission Reduction Quantification for the Southern California Association of Governments' SB 375 Sustainable Communities Strategy. Sacramento, CA: CARB. https://www.arb.ca.gov/cc/sb375/scag_scs_tech_eval0512.pdf.

[3293] United States Department of Transportation, Federal Highway Administration (USDOT). 2012. Conformity Determination for SCAG's 2012 RTP/SCS and 2010/11 FTIP through Amendment No. 11-24. Sacramento, CA: USDOT. http://rtpscs.scag.ca.gov/Documents/2012/final/SCAGFF24_060412.pdf.

[3294] United States Department of Transportation, Federal Highway Administration (USDOT). 2013. Conformity Determination for SCAG's 2012 RTP/SCS through Amendment 1 and the 2013 FTIP through Amendment No. 13-04. Sacramento, CA: USDOT. http://rtpscs.scag.ca.gov/Documents/2012/final/SCAGFF04_071513.pdf.

Testimony No.	Environmental Topic	Testimony	Response to Testimony
			Communities Strategy (2016 RTP/SCS).[3295] The 2016 RTP/SCS sets forth the same balanced land use plan described in the 2012 RTP/SCS, including its land use and transportation strategies, investments, and policies.[3296] The 2016 RTP/SCS also identifies new transportation investments to improve regional mobility, including new rail transit facilities, vehicle replacement programs, new funding for active transportation, bus system improvements, network maintenance projects, and highway and arterial improvement projects.[3297] Like its predecessor, the 2016 RTP/SCS anticipates development of the Project site at densities consistent with the *Centennial Specific Plan.*.[3298,3299,3300] In addition, the 2016 RTP/SCS identifies the Northwest SR-138 Improvement Project (which is partially located within the Project's boundary and was recently approved by Caltrans) as a major regional highway project needed to improve regional access to opportunities such as jobs, education, recreation and healthcare.[3301,3302,3303] In June 2016, CARB determined that implementation of the 2016 RTP/SCS would achieve SCAG's per capita GHG reduction target of 8 percent by 2020 and would achieve an 18 percent per capita GHG reductions by 2035 (exceeding the SCAG 2035 target of 13 percent by five percentage points).[3304,3305] State and federal regulators also determined that the 2016 RTP/SCS conforms to the

3295 SCAG 2016a
3296 *Id.*, p. 69
3297 *Id.*, pp. 89, 94, 101
3298 Southern California Association of Governments (SCAG). 2015b (December). *2016-2040 Sustainable Communities Strategy (SCS) Background Documentation Appendix* (pp. 6, 7, 10, 11). Los Angeles, CA: SCAG. http://scagrtpscs.net/Documents/2016/final/f2016RTPSCS_SCSBackgroundDocumentation.pdf.
3299 Southern California Association of Governments (SCAG). 2016e (April). *2016-2040 RTP/SCS Public Participation and Consultation Sub Appendix Part 1 of 5 Comments and Responses Adopted April 2016* (p. 115). Los Angeles, CA: SCAG. http://scagrtpscs.net/Documents/2016/final/subAppendix01_2016fRTPSCS.pdf.
3300 DRP 2017, p. 6-8
3301 SCAG 2016a, p. 100
3302 Southern California Association of Governments (SCAG). 2017a (April). The 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy Amendment #1 (p. 35). Los Angeles, CA: SCAG. http://scagrtpscs.net/Documents/2016/final/f2016RTPSCS_amend01.pdf.
3303 Southern California Association of Governments (SCAG). 2017b (July). The 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy Amendment #2 (p. 2). Los Angeles, CA: SCAG. http://scagrtpscs.net/Documents/2016/final/f2016RTPSCS_amend02.pdf.
3304 CARB 2016
3305 California, State of, California Air Resources Board (CARB). 2016a (June). Technical Evaluation of the Greenhouse Gas Emission Reduction Quantification for the Southern California Association of Governments' SB 375 Sustainable Communities Strategy. Sacramento, C7777A: CARB. https://www.arb.ca.gov/cc/sb375/scag_final_staff_report_06_29_16.pdf.

Testimony No.	Environmental Topic	Testimony	Response to Testimony
			SIP and its control measures to reduce regional criteria pollutant emissions consistent with NAAQS.[3306,3307] In light of the procedural history associated with SCAG's RTP/SCS approval, this comment's suggestion – without evidence - that SCAG, CARB, USEPA, the Federal Highway Administration, and the Federal Transit Administration were all somehow "infiltrated" by the development community to "erode [SB 375's] accountability mechanisms" is without factual foundation. Please also note that many state and local measures in addition to RTP/SCS will be needed to meet the State's climate goals. For example, ARB in its 2017 Scoping Plan[3308] (p. 76) notes that, for the transportation sector, there is a gap between what SB 375 can provide and what is needed to meet the State's 2030 and 2050 GHG reduction goals.
RPC-130	Greenhouse Gas	It -- it really limits the amount of greenhouse gas reductions we can achieve as a region, and I think – It's not -- you know, we're not in a place where we -- we look around and say "What else can we do?" Stopping a project like this is -- is what we can do to make good on our climate goals. At the state level, our scoping plan aggregates all the greenhouse gas reductions from these regional plans as well as other sectors. Right now, we're not -- we're not set to achieve reductions of the scoping plan as soon as we need to do. Unfortunately, the lawyer before you today also has a lawsuit filed against that scoping plan trying to erode the accountability mechanisms and a viable path to being -- making good on our climate goals.	As discussed in Final EIR, response to Comment F.8-20, CARB has determined that implementation of the 2016 RTP/SCS would achieve SCAG's per capita GHG reduction target of 8 percent by 2020 and would achieve an 18 percent per capita GHG reductions by 2035 (exceeding the SCAG 2035 target of 13 percent by five percentage points). This comment's general opposition to the Project is noted and will be provided to County decision makers for their consideration. Also see Response to Testimony RPC-129.

3306 United States Department of Transportation, Federal Highway Administration (USDOT). 2016. Conformity Determination for SCAG's 2016 RTP/SCS. Sacramento, CA: USDOT. http://scagrtpscs.net/Documents/2016/notices/FHMW-FTA_2016RTPSCSConformityDetermination_2016-0601.pdf.

3307 United States Department of Transportation, Federal Highway Administration (USDOT). 2017. Conformity Determination for SCAG's 2016 RTP/SCS Amendment No. 1 and 2017 FTIP Consistency Amendment No. 17-03. Sacramento, CA: USDOT. http://www.scag.ca.gov/programs/Documents/16RTP_A1.pdf.

3308 California Air Resources Board (CARB). 2017. California's 2017 (November). Climate Change Scoping Plan, the Strategy for achieving California's 2030 greenhouse gas target. https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf.

Testimony No.	Environmental Topic	Testimony	Response to Testimony
RPC-131	Conclusion	So transportation and gridlock, automobile dependence and climate change, the massive amount of the GHGs that we're putting into our climate I would argue are the largest challenges facing our region, and a project like this – -- does not help us address that.	The Commenter's opinion is noted, has been heard by the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. However, the County disagrees with Commenter's characterization, and notes that the Project will help to address regional climate goals, as further addressed in Response to Testimony RPC-130.

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3.3 RESPONSES TO CORRESPONDENCE RECEIVED PRIOR TO JUNE 11, 2018 REGIONAL PLANNING COMMISSION HEARING

All comment letters received by the County through July 10, 2018 have been included and responded to herein. Comments that raise environmental issues pertinent to the analysis presented in the EIR have been thoroughly addressed in these responses.

With respect to the new comments letters received, individual comments within the body of each letter have been identified and numbered. Brackets delineating the individual comments and a numeric identifier have been added to the right margin of the letter. Responses to each bracketed comment are included on the page(s) following each comment letter, and the electronic PDF file includes hyperlinks between the comment and the associated response to facilitate ease of review.

Table 1 below presents a summary listing of the additional comment letters received, including the commenting agency/individual; the assigned numbering for each comment letter; the date of the correspondence; and the page number where the comment letter can be found herein.

TABLE 3.3-1
ADDITIONAL LIST OF COMMENTERS

Comment Letter Category		Date of Correspondence	Follows Page Number
Letter No.	**Commenter**		
A. Federal Agencies			
-	-	-	-
B. State Agencies			
-	-	-	-
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D. Regional Agencies

CENTENNIAL

at TEJON RANCH

GOLDEN VALLEY MUNICIPAL WATER DISTRICT

49744-3 Gorman Post Road
Gorman, California 93243
Phone: (661) 248-8501 – Fax: (661) 248-5563

July 10, 2018

Los Angeles County Regional Planning Commission
David W. Louie, District 2, Chair
Doug Smith, District 1
Laura Shell, District 3
Elvin W. Moon, District 4
Pat Modugno, District 5
320 West Temple Street
Los Angeles, CA 90012

RE: 2017 Centennial Water, Wastewater and Recycled Water Infrastructure Project

Dear Chairman Louie and Board Members:

Thank you for the opportunity to address the Planning Commission about the Centennial Project on June 6, 2018. As President of the Golden Valley Municipal Water District (District) I wanted to take this opportunity to briefly clarify my comments. The Golden Valley Municipal Water District Board of Directors voted to approve the Water Supply Assessment (WSA) on May 18, 2011 based on the proposed Centennial project at that time. On May 12, 2011, our Board entered into an agreement with Centennial to serve as the water purveyor for the Centennial project at that time, with Centennial providing the water supply needed to serve the project, as well as consulting with the District during the planning, design and construction of the water, wastewater and recycled water elements of the Centennial project. In addition, the 2011 agreement also called for Centennial to pay all the District's costs during this process, and payment for the entire project construction for the water, wastewater and recycled water infrastructure. A copy of that agreement is attached to this letter.

Our District Engineer and technical consultant, Frank Springer has reviewed the January 4, 2017 Final Memorandum prepared by Kennedy/Jenks Consultants for the "Peer Review of the Water Supply and Demand Assessment for the Proposed Centennial Specific Plan Development", and the February 2017 report by Psomas "Potable Water, Wastewater and Recycled Water Demand and System Plan" for the Centennial Project. Mr. Springer's review of these two documents provided by Centennial has not identified any concerns at this time for our District as it relates to the proposed 2017 Centennial project water, wastewater and recycled water infrastructure.

ADD-D.1-1

I also want to clarify my remarks and make clear that both the County, and the Local Agency Formation Commission (LAFCo) of Los Angeles, must approve the project and approve expansion of our Agency's service area boundary before we can serve as the water purveyor for the project. Once the project is included within our adjacent service area, the District will also provide water supply verifications for future tentative tract maps in compliance with applicable State law. Additionally, our Board's District Engineer and technical consultant, Frank Springer,

will provide District standards to Centennial, and participate in the development of the project water, wastewater and recycled water plans and technical specifications for each phase of the project, and oversee on behalf of the District the construction of these improvements for each phase of the project.

We continue to expect our District Engineer and technical consultant, Frank Springer, to work with Centennial and the County during the planning, design and construction of the water, wastewater and recycled water improvements for each phase of the project.

ADD-D.1-1 (cont'd)

Sincerely,

Rose Bryan

Rose Bryan, President
Golden Valley Municipal Water District

cc: Amy Bodek, Director of Los Angeles County Department of Regional Planning
Jan Bircumshaw, Office Manager, Golden Valley Municipal Water District
Frank Springer, District Engineer, Golden Valley Municipal Water District

Response to Comment Letter ADD-D.1
Golden Valley Municipal Water District
July 10, 2018

Response to Comment ADD-D.1-1:

Thank you for your comment and for your participation in this public process. The County acknowledges this comment's confirmation of an existing agreement between the Project Applicant/Developer and Golden Valley Municipal Water District (GVMWD), whereby the Commenter has agreed to serve as the Project's water purveyor and the Project Applicant/Developer has agreed to provide the needed water supply and to consult with GVMWD during planning, design and construction of the water, wastewater and recycled water components of the Project.

As this comment accurately notes, and as discussed in the EIR on pages 5.18-2 through 5.18-3, in May 2011, the GVMWD approved a water supply assessment for the Project in accordance with Sections 10910 et seq. of the California Water Code (WSA). As discussed in EIR Section 8.3, Project History (page 8-9), the Project was modified after the WSA was approved to reduce residential development by 3,665 dwelling units, and to reduce commercial and business park development by 4.12 million square feet. Accordingly, the water supply required to serve the Project has been reduced and is expected to fall well within the water supply and demand assumptions considered in the WSA.

This comment confirms that the GVMWD's District Engineer and technical consultant have reviewed the January 2017 Final Memorandum prepared by Kennedy/Jenks Consultants for the "Peer Review of the Water Supply and Demand Assessment for the Proposed Centennial Specific Plan Development," and the February 2017 report by Psomas entitled "Potable Water, Wastewater and Recycled Water Demand and System Plan" for the Project. This comment further confirms that, based on such review, GVMWD has not identified any concerns as it relates to the Project's proposed water, wastewater and recycled water infrastructure.

Finally, this comment clarifies the Commenter's previous statements concerning the Project to explain that the County must first approve the Project, and the Los Angeles Local Area Formation Commission must first approve expansion of GVMWD's service area boundary to include the Project site, before GVMWD could serve as the Project's water purveyor. As this comment correctly explains, once the Project is included within GVMWD's service area, the GVMWD would provide water supply verifications for future tentative tracts maps in compliance with State law. The GVMWD's expectation that its District Engineer and technical consultant will continue to work with the Project and the County during the planning, design and construction of water, wastewater and recycled water infrastructure for each Project phase is noted with appreciation.

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F. Organizations

CENTENNIAL

at TEJON RANCH

Pacific Crest Trail Association

ADD-F.7

June 28, 2018

Mr. Jodie Sackett
County of Los Angeles Dept. of Regional Planning
Hall of Records, 13th Floor, Room 1348
320 West Temple Street
Los Angeles, CA 90012

Re: Final Environmental Impact Report (FEIR) for the Centennial Project, State Clearinghouse No. 2004031072

Dear Mr. Sackett:

The Pacific Crest Trail Association (PCTA) appreciates and thanks County staff for considering comments on the Draft Environmental Impact Report for the Centennial Project (DEIR) set forth in our July 13, 2017 transmittal designated as comment letter "F.4" in the FEIR. The PCTA is the primary private partner with the USDA Forest Service in the management of the 2,650 mile Pacific Crest National Scenic Trail (PCT) through California, Oregon and Washington. The PCTA would also like to thank Tejon Ranch Company (TRC) staff for inclusion of our comments in the FEIR. Especially, comments regarding the visual analysis as seen by trail users of the PCT as it traverses the Centennial Project. ADD-F.7-1

Overall, upon review of the FEIR, we are pleased that our comments on the DEIR have been addressed satisfactorily. However, we would encourage County staff and Board of Supervisors to consider an alternative location (as listed in the DEIR, 4-59) of the wastewater reclamation facility (WRF East) along the northwest end of 300th Street West. The PCT does pass alongside the proposed WRF East location. Also, a school and park are proposed directly across the street from the WRF East location. Facilitating a different location of the Waste Water Treatment Plant would reduce potential visual, noise and smell impacts to the PCT, park and school at the northern gateway area to the Centennial Project along 300th Street West. The alternative 23 acre WRF East site located east of 300th Street West along the northern edge of the project would environmentally remain unchanged, even reduce a pumping station, but would need a change of zoning. ADD-F.7-2

Thus we write to express that, with the exception of the wastewater treatment plant location, our concerns regarding the Centennial Specific Plan are satisfied and we believe that with the changes in trail location and the conservation plans underway surrounding a new PCT location on TRC lands, the overall impact of large scale plans regarding Tejon Ranch will result in a dramatic net benefit to the public as it utilizes the Pacific Crest National Scenic Trail in future years. ADD-F.7-3

We look forward to continuing our work with TRC, the Tejon Ranch Conservancy, and our agency partners in Los Angeles County to provide a world class experience to the public along the Pacific Crest National Scenic Trail. ADD-F.7-4

Respectfully Submitted,

Liz Bergeron

Liz Bergeron
Executive Director and CEO

1331 Garden Highway
Sacramento, CA 95833
916-285-1846 (Main Office)
www.pcta.org

Celebrating 50 years of the PCT as a National Scenic Trail.

PACIFIC CREST TRAIL 1968 50 YEARS 2018

Response to Comment Letter ADD-F.7
Pacific Crest Trail Association
June 28, 2018

Response to Comment ADD-F.7-1:

Thank you for your participation in this public process. These comments will be provided to the Regional Planning Commission and Board of Supervisors for consideration. The lead agency notes the Commenter's thanks with appreciation. This is an introductory comment, and no further response is required.

Response to Comment ADD-F.7-2:

This comment confirms that the Final EIR adequately responds to all comments on the Draft EIR previously submitted by the Commenter. As noted by the Commenter, one of the two permanent wastewater reclamation facilities (WRFs) proposed for the Project is planned for a location east of the aqueduct and is referred to as "WRF East". The treated effluent from the two WRFs would be supplied to the recycled water distribution system to meet irrigation demands throughout the Project site, as well as some indoor uses such as wastewater and cooling uses in the business park. (Draft EIR, Section 4.0, Project Description, page 4-59) Construction of WRF East would occur first and would be operational upon site occupancy – it would be expanded in phases, as required to treat the wastewater flows generated by occupied land uses. (*Ibid*.) This facility is proposed for development on a site near the northeastern corner of the Project site, just west of 300th Street West, as shown on Draft EIR Exhibit 4-14. The Draft EIR identifies a potential alternative location for WRF East, on property located to the east of 300th Street West at the northern edge of the Project boundary, which is currently designated as Low-Density Residential. (*Ibid.*) The Commenter's preference for this alternative location is noted for the record and will be provided to the Regional Planning Commission and the Board of Supervisors for consideration. This comment does not address the sufficiency of the EIR, and no further response is required.

Response to Comment ADD-F.7-3:

With regard to the location of WRF East, please see response to Comment ADD-F.7-2. The Commenter's opinion regarding Project benefits are noted for the record and will be provided to the Regional Planning Commission and Board of Supervisors. This comment does not specifically address the EIR, and no further response is required.

Response to Comment ADD-F.7-4:

This concluding comment will be passed along to the Regional Planning Commission and Board of Supervisors for consideration. This comment does not address the EIR, and no further response is required.

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G. Individuals

CENTENNIAL

at TEJON RANCH

Mr. Jodie Sackett
County of Los Angeles
Department of Regional Planning
Hall of Records, 13th Floor, Room 1348 320 West Temple Street
Los Angeles, CA 90012 jsackett@planning.lacounty.gov

May 20, 2018

Dear Mr. Sackett

I am writing again to show my support for the Centennial project by Tejon Ranch (Specific Plan No. 02-232 / Centennial Specific Plan).

This project has been in the planning stages and thus under continuous refinement and improvement for a dozen or more years. In it's current form it is a a carefully thought-out and a much needed addition to the growing Antelope Valley but also to the residents of the more distant communities such as Frazier Park.

The project will be a mix of villages and neighborhood centers encouraging walking and biking with extensive parks, greenbelts and hiking trails, preserving almost half of the entire project site as designated Open Space.

In addition to the estimated 25,00 construction jobs created during build out, the included commercial and institutional land use areas will produce on-site employment and decrease work-related commuting. The additional employment opportunities will be provided by the planned 4 fire stations, a sheriff station, public library, one K-5, 5 K-8, and 1 high school, and the land set aside for medical facilities, and estimated 20,000 permanent jobs.

Centennial will create an environmentally and economically sustainable community by including a wide array of housing, business park and office, commercial, schools, parks, natural open space, cultural and public, all of which will be a welcome neighbor to the Frazier Mountain area.

I am asking the Regional Planning Commission to approve Centennial and allow the developers to move expeditiously to the next stage.

ADD-G.43-1

Candace Huskey

Candace Huskey
500 East End
Frazier Park, CA 93225

(661)333-3383

hskybrwn@frazmtn.com

RECEIVED
2018 JUN 28 PM 3:37
DEPT OF REGIONAL PLANNING

Response to Comment Letter ADD-G.43
Candace Huskey
Received June 28, 2018

Response to Comment ADD-G.43-1:

Thank you for your participation in this public process. The Commenter's words in support of the Project will be passed along to the Regional Planning Commission and the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR, and no further response is required.

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Dear Regional Planning Commission,

I am very strongly opposed to the Centennial Development. It is a 12,000 acre community that would include 20,000 homes. The project will ruin the habitats of protected species and contribute to urban sprawl that increases the region's car dependence, worsening air quality and generating more green house gases. The area is home to many endangered species including the California condor, San Joaquin kit fox and bald eagle. 99% of California native grasslands are already gone forever, you must not allow this project to be built and destroy what little remains.

ADD-G.44-1

Respectfully,

Response to Comment Letter ADD-G.44
Form Letter 5
Various Dates
Received June 12, 2018

Response to Comment ADD-G.44-1:

A form letter was prepared by an unknown source and was made available to the public for submittal to the County. This form letter was received from a total of five commenters, with no variations in content. These form letters appear as Appendix A-5 to this document. The response to this form letter is as follows.

Thank you for your comment and for your participation in this public process. The Commenters' expression of general opposition to the Project will be provided to the Regional Planning Commission and the Board of Supervisors for their consideration. However, the lead agency disagrees with the Commenters' characterization of the Project. With regard to habitat and species conservation generally, please see Draft EIR, Section 5.7, Biological Resources, and Final EIR, responses to Comments F.8-107, F.8-108, and F.8-110. With regard to specific species, please see Final EIR, responses to Comments A.3-3 and B.4-21 through B.4-23, F.8-138 through F.8-143 (California condor), F.8-163 and F.8-172 (San Joaquin kit fox – this species is not present on the site and will not be affected by the Project), and F.8-146 through F.8-148 (bald eagle). For an in-depth refutation of the assertion that the Project is "urban sprawl", please see Final EIR, response to Comment F.8-20. With regard to grasslands conservation, please see Final EIR, responses to Comments B.4-43, B.4-63, F.8-113 and F.8-119 through F.8-128. This comment does not make specific assertions regarding the adequacy of the EIR, and no further response is required.

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Stephanie Pincetl
130 S. Sycamore Ave
Los Angeles CA 90036
spincetl@gmail.com
310-245-2339

June 26 2018

Dear Members of the Regional Planning Commission,

I am writing to provide some comments on the proposed Centennial development. I will go over the following key points:

1. Centennial and Energy demand
2. Centennial and transportation impacts and needs
3. Centennial and water use
4. Centennial and resource needs
5. Centennial and fire risk
6. Centennial Externalities including County budgets
7. Centennial Sustainability and future generations

ADD-G.45-1

Energy

The first phase of the development, 19,000 homes, places residents in the northern part of Los Angeles County projected for the highest numbers of extreme heat as the region warms up over the next few decades due to climate change. This has significant ramifications for energy needs – whether conventional or renewable – grid resilience and thermal comfort of residents. Building in this part of the county will require more energy per capita, and more energy infrastructure than in other areas. It is at most risk of service interruptions from increasing demand. Building in this area will expose people to high cooling bills, especially as *Time of Use* rates get deployed, as well as high out of doors thermal discomfort (see Burillo et al 2018, just submitted to the California Energy Commission). Burillo et al 2018– among other studies – show that common wall buildings, densely agglomerated, reduce energy needs considerably, a land use form more likely in the already urbanized regions of the county.

ADD-G.45-2

Transportation

Transportation impacts are likely to be significant in their cumulative effect – something difficult to measure, but experienced by those involved in utilizing the 5 corridor. Even if there is vehicle electrification (adding to the grid load just discussed above), these additional electric vehicles are still vehicles that impact circulation and increase congestion. In addition, there will be many more service vehicles due to the development that may or may not be electric. Air pollution impacts are likely to increase due to this ex urban development.

ADD-G.45-3

Water

Water will be needed. No doubt the developers have pointed to ample water resources, but the Commission would be well served to understand whether this is traded paper water or wet water, and what long term availability looks like, especially with a changing climate. The Commissioners might investigate, if it is wet water, where exactly it is coming from, at what promised price, and which other entity will be foregoing it. If it is ground water, please ask whether the groundwater resource is to be managed and by whom, and what provisions are being made for groundwater recharge. Water neutrality, at a minimum, should be required as well preservation of existing vegetation and ecosystems throughout that are adapted to the existing water regime.

ADD-G.45-4

Resources

There is little to be done about the resource needs for such a development, materials for roads, sidewalks, housing construction, commercial buildings and more. Already northern Los Angeles County will be shortly experiencing sand-for-concrete limitations (Clinkenbeard 2012), and expansive new infrastructure will require expansive use of materials. Each type of material has embedded energy costs for processing and manufacturing, as well as the GHGs expended in the transportation to the site all of which contribute to GHG emissions; our state accounting is weak in this area, but lifecycle costs should be counted as part of the GHG emissions of any new development (what are the GHG emissions embedded in new sewage infrastructure, like cast iron pipes, for example, or PVC drains?). Resource impacts on places of origin are not taken into account either but are not insignificant, as the abandoned gravel mines in the county can show. The Commission might ask of the developer whether they are going to be purchasing GHG emissions offsets, and if so, how many and what those offsets entail. This will provide the Commission an opportunity to weigh whether it finds them credible and appropriate. Often offsets simply mean other places are responsible for our consumption.

ADD-G.45-5

Fire

The Commission might inquire whether Centennial might also increase fire risk in this part of the region by either further fragmenting the landscape and thus creating more human ignition potential (more miles of suburbs adjacent to wildlands) and/or expose the proposed residents to more fire risk than infill development. Will the development offset any additional fire fighting costs that will be incurred? The Fourth Climate Assessment of the state, which will be published later this summer, concludes that human ignition accounts for most of the wildfire incidents. Adding more people and more roads will inevitably increase fire incidents.

ADD-G.45-6

Fiscal impacts and Externalities

Approving far flung development such as Centennial, continues a long standing California pattern of existing urban areas fiscally subsidizing far off developments. Such an approach to providing housing undermines state policy direction to concentrate urbanization in the already built areas to reduce impacts (SB 375, for example), exercise fiscal discipline, and to build walkable healthy communities. The Commission would be well advised to inquire whether the

ADD-G.45-7

development will contribute sufficiently to the county's revenues to offset its costs to the region: policing, sanitation, road maintenance over time, social services and more. Developments such as Centennial increase the difficulty and cost of providing public transportation and reducing vehicle miles traveled. In contrast, concentrating development in the already developed county core accomplishes a number of things: it increases the efficiencies of infrastructure, including transportation, and generally will be less water intensive. It takes advantage of already built infrastructure, like schools that are seeing declining enrolments, sewage treatment plants (that are now utilized at under capacity), leverages and utilizes our investments in public transportation, and jobs. According to Zev Yaroslovsky, there are 400,000 underutilized parcels in the county that can accommodate multiple family dwellings. Continuing to neglect the potential of the already built area to house more people in a livable, walkable urban environment perpetuates the carbon intensive, land intensive and extensive patterns of the twentieth century. If we wish to move to a livable future, together, it makes more sense to develop where we already have available infrastructure and services, and to reduce environmental and ecological impacts on our disappearing California landscapes. There is no question this development will fragment habitat and cause further environmental degradation.

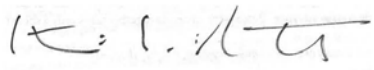
ADD-G.45-7 (cont'd)

Centennial represents the past. The county, especially with its commitment to sustainability must forge a new approach to land use that is compatible with a sustainable future for all and no longer subsidizes land development that creates expensive externalities borne by County residents and its lands. While Centennial's developers may end up meeting the letter of the law for GHG emissions (as the laws stand today), habitat protection, water provision and more, the development as a whole violates the spirit of sustainability, transport accessibility and the deep decarbonization path the state is embarking on. It perpetuates flight from our urban cores to mythical suburban enclaves that often end up breeding alienation and depression and costing all residents more for their exclusive maintenance. Centennial's approval will be a mistake to be borne by all, differently.

ADD-G.45-8

Thank you for your serious consideration

Best regards



Stephanie Pincetl

Climate Change in Los Angeles County: Grid Vulnerability to Extreme Heat
By Daniel Burillo, Mikhail Chester, Stephanie Pincetl, Eric Fournier, Daniel Walton, Fengpeng Sun, Marla Schwartz, Katharine Reich, Alex Hall a report for California's Fourth Climate Change Assessment, prepared for the State Energy Commission.

CALIFORNIA NON-FUEL MINERALS 2012

By John Clinkenbeard, Supervising Engineering Geologist (PG #4731) and Joshua Smith, Engineering Geologist (GIT # 379), California Geological Survey

Response to Comment Letter ADD-G.45
Stephanie Pincetl
June 26, 2018

Response to Comment ADD-G.45-1:

Thank you for your participation in this public process. The Commenter's concerns are noted for the record and will be provided to the Regional Planning Commission and the Board of Supervisors for consideration. This introductory comment provides a list of the topic areas addressed in this letter. Responses to specific comments on each topic are provided below. No further response is required to this introductory comment, which does not raise specific concerns regarding the EIR.

Response to Comment ADD-G.45-2:

Energy

With regard to the assertion that the Project will require more infrastructure and energy per capita, and residents will experience more energy service interruptions than is typical, the Commenter's opinion is noted for the record. However, the lead agency has appropriately analyzed energy demand and infrastructure requirements specific to the Project and location, and consulted with utility providers to ensure that sufficient energy and infrastructure will be provided for the Project. Electrical service to the Project site is provided by Southern California Edison (SCE), which has transmission and distribution facilities located within and near the Project site as described on Draft EIR, page 5.20-7. The Draft EIR acknowledges that the Project would place new demands on electrical service and create the need for new utility infrastructure. (*Id.*, page 5.20-8) During operations, SCE estimates that all proposed land uses in the Project over a 20-year horizon would generate a peak increase in electricity demand of approximately 165 MW at buildout – this is a conservative assumption that does not take proposed energy efficiency measures into account. (Id., pages 5.20-8, -9.) SCE would serve the Project's demand for electrical service through the existing distribution facilities on the Project site and the utility improvements that are proposed as part of the Project, which are described on Draft EIR pages 5.20-10 through 5.20-12. SCE has indicated that with proposed infrastructure improvements, there would be adequate electrical supplies to serve the Project under peak demand conditions. (*Id.*, page 5.20-9) Further, per MM 20.2-1, the Project Applicant/Developer will coordinate with SCE to ensure that there are no prolonged disruptions to existing transmission lines that extend through the study area, and coordinate in the design and implementation of future services and facilities, to ensure that service and infrastructure is adequate to serve proposed land uses and are available for the first occupied uses. (Final EIR, page 3-82) The study cited by the Commenter indicates that the Los Angeles region will see an increase in the number of "extreme heat days" by mid-century, adding strain to the energy grid. However, as noted by the California Natural Resources Agency, a resulting project funded by the Electric Program Investment Charge (EPIC) program is developing data that will help local and regional agencies and utilities identify where the grid is most vulnerable, which neighborhoods are served by these problem spots, and what types of adaptation measures

should be taken to improve reliability and minimize risks to public health and safety.[3309] The Commenter has provided no specific evidence to refute that proposed energy service and infrastructure will meet Project demand, or that the Project's electricity and energy impacts would be less than significant with mitigation, and no further response is required.

With regard to the concern that cooling bills will be high for Project residents and that residents will experience "high out of doors thermal discomfort", this comment will be passed on to the Regional Planning Commission and the Board of Supervisors for consideration. However, the economic cost of living in a warm climate is a social impact, not a physical impact on the environment that must be considered under CEQA. Moreover, the "high out of doors" temperatures described by the Commenter is a characteristic of the existing environment that is common to the planning area and is not expected to be exacerbated by the Project in any meaningful way. With regard to the note that common wall buildings reduce energy use, the lead agency notes that the Project has been designed to maximize energy efficiency. The Project incorporates multi-unit and townhome residential buildings in appropriate locations but provides a wide range of housing types to address the state's shortfall of about 3.5 million units needed by 2025 in both affordable and market rate housing.[3310] Given that this comment does not address a concern specific to CEQA or the EIR, no further response is required.

Response to Comment ADD-G.45-3:

Transportation

With regard to the comment that cumulative transportation impacts will be significant, the Commenter is correct that the lead agency has conservatively concluded the Project would have significant and unavoidable cumulative impacts because it cannot require Caltrans to implement improvements identified in mitigation measures. However, the lead agency has appropriately analyzed cumulative transportation-related impacts consistent with CEQA requirements in Draft EIR Section 7.0, Cumulative Impacts, and concluded that if implemented, mitigation measures for impacts to the I-5 and off-site intersections involving fair share contributions to identified improvements would reduce all cumulative impacts to a less than significant level. (Draft EIR, Section 7.0, page 7-19) The Traffic Mitigation Agreement proposed by MM 10-3 provides a mechanism for the needed transportation improvements to be implemented by providing advance funding for planning, design, and construction of certain improvements to Caltrans facilities and establishing a funding program to collect fair shares for other improvements. (Ibid.) Nevertheless, the Draft EIR recognizes that the lead agency does not have jurisdiction over Caltrans and thus cannot require Caltrans to implement planned and needed improvements – if Caltrans does not implement them, the Project would contribute to significant and unavoidable impacts, as

[3309] California Natural Resources Agency, Press Release: Natural Resources Agency Releases Updated Report on Climate Adaptation, Resiliency Strategies. January 29, 2018. Available at: http://resources.ca.gov/wp-content/uploads/2018/01/CNRA-releases-2018-upate-to-Safeguarding-Report.pdf. Last accessed July 3, 2018.

[3310] McKinsey Global Institute, A Tool Kit to Close California's Housing Gap: 3.5 million Homes by 2025, October 2016. Available at: https://www.mckinsey.com/featured-insights/urbanization/closing-californias-housing-gap. Last accessed July 3, 2018.

conservatively concluded in the Draft EIR. (*Id.,* pages 7-19, 7-20) The Commenter has not provided specific assertions regarding Project-related cumulative transportation impacts or inadequacies of the EIR analysis, and no further response is required.

With regard to the statement that even electric vehicles will add to potential transportation impacts related to circulation and congestion, the lead agency acknowledges this fact and notes that the EIR does not fail to include trips made by electric vehicles in its transportation impact analysis. Rather, the impact analysis is based on the total number of estimated vehicle trips generated by the Project, regardless of the type of vehicle. See Draft EIR, Section 5.10, Traffic Access and Circulation, pages 5.10-48 to 5.10-134 for further discussion of potential transportation impacts related to circulation.

With regard to the assertion that air pollution impacts will increase from additional vehicles, the lead agency notes that the EIR thoroughly and appropriately analyzes potential vehicle-related air quality impacts from Project implementation, and incorporates all feasible mitigation to reduce impacts, both for temporary impacts from construction vehicles and from long-time operational vehicle use. At Project buildout, in 2035, long-term operational emissions of VOC, NOx, CO, PM10, and PM2.5 would exceed AVAQMD and SCAQMD CEQA significance thresholds, and the primary source of emissions would be from vehicle operations. MM 11-4, MM 11-5, and MM 11-6 would be implemented to reduce operational emissions; however, the impact would remain significant and unavoidable. It should be noted that the Project's proposed residential and non-residential uses have been planned for a balance between the number of jobs available and the number of on-site housing units in an effort to encourage local trip making. The Project requires establishment of a Transportation Management Association (TMA) that develops strategic linkages with other Antelope Valley/Santa Clarita Valley TMAs or like organizations, to maximize transit efficiencies and services. The TMA would reduce dependence on automobiles and provide for a more efficient use of transportation resources among Project occupants, reducing pollutant emissions. MM 11-10 requires implementation of PDF 11-6, which specifies that residences or other sensitive land uses shall not be built within 150 feet of SR-138. The analysis demonstrates that the incremental cancer risk and chronic non-cancer health risk to sensitive receptors beyond the 150-foot buffer would be less than significant. The analysis also indicates that health risks to existing residents adjacent to SR-138 in the Project vicinity would be less than significant with incorporation of MM 11-10. Further, the Project would not conflict with AVAQMD and SCAQMD air quality management plans (AQMP) because the land uses, population, and vehicle travel elements of the Project are anticipated in the SCAG 2012–2035 RTP/SCS and the SCAG 2016–2040 RTP/SCS, which is the basis for AQMP development. In fact, the SCAQMD has determined that the Project's Centennial Specific Plan "exemplifies [the County's] leadership in promoting sustainable communities development" and "will help reduce emissions from mobile sources, protect the public health from air pollution, and achieve healthful air in the [South Coast Air] Basin". (See Final EIR, Comment D.4-2.) Finally, the Project is subject to a plethora of regulatory requirements that reduce air pollution impacts from vehicular/mobile sources, as discussed in the Final EIR. (See Final EIR, pages 2-351 to 2-354.)

Response to Comment ADD-G.45-4:

Water

With regard to the Commenter's concerns about source and long-term sustainability of Project water supplies, the EIR has thoroughly analyzed demand and supply for the Project. As discussed on Draft EIR pages 5.18-2 to 5.18-3, a Water Supply Assessment (WSA) for the Project was approved in accordance with Sections 10910 et seq. of the California Water Code by the Golden Valley Municipal Water District (GVMWD) in May 2011. (Draft EIR, Appendix 5.18-A) The Draft EIR found the Project's water supplies will sustainably meet buildout potable and recycled water demand and maintain an average annual reserve supply in the two Project water banking facilities of more than 79,000 acre-feet after buildout, or more than 11 years of full-buildout potable water demand. This surplus would persist over time based on an 82-year hydrologic period of record, including single dry and multiple dry years, and taking account of potential climate change impacts. The analysis of the Project's water supplies is consistent with and based on the most current projections prepared by state and regional public agencies with expertise and responsibility for analyzing water supplies, including imported and ground water, under applicable laws, regulations and policies. The Project's recycled water use is consistent with state and regional policies, rules and regulations encouraging use of recycled water to reduce demand for potable supplies. In January 2017, the Potable Water, Wastewater, and Recycled Water Demands and System Plan for the Project was peer reviewed by Kennedy/Jenks in a report submitted to the County. The Project's water supply analysis is consistent with CEQA requirements, and the Commenter provides no evidence to the contrary. See Draft EIR, Section 5.18, and Final EIR, response to Comment F.8-212 for further discussion of this topic. With regard to the price of water supplies, please note that the fiscal impact of the Project is purely a socioeconomic impact not related to adequacy of the EIR, per CEQA Guidelines Section 15064(e). For an informational discussion of the price of water supplies, see Draft EIR, Appendix 5.18-A.

With regard to regional long-term water supply availability, long-term and cumulative regional water supplies are discussed in Draft EIR Section 7.0, Cumulative Impacts, pages 7-26 to 7-28 and in Section 5.18, Water Resources. The County's AVAP and General Plan EIRs concluded that current water supplies in the Antelope Valley are sufficient to meet demand up to 2035 during average water years. The EIRs also noted that available water plans and projections, including the 2013 Antelope Valley Integrated Regional Water Management Plan, indicated current supplies will meet dry and multiple-dry year demand by 2035. However, because potential buildout of the AVAP and General Plan in the region after 2035 could further increase regional water demand, and there are no water supply projections extending after 2035, the EIRs found cumulative impacts to regional water supplies significant and unavoidable. The Draft EIR determined that the Project would help reduce cumulative water supply impacts identified in the AVAP and General Plan EIRs, because it would achieve water use efficiencies above average regional rates and would ensure that the Project-related increment of anticipated future regional growth would occur with a high level of water conservation, including state-of-the art household and irrigation installations and enhanced recycled water use. Nevertheless, consistent with the AVAP and General Plan EIRs, the Draft EIR determined that long-term cumulative water supply impacts would be

significant and unavoidable. See Final EIR, response to Comment F.8-212 for further discussion.

With regard to climate change impacts on Project water supply, an extensive and sophisticated analysis of potential climate change impacts was incorporated into the projections used in the Antelope Valley-East Kern Water Agency (AVEK) Urban Water Management Plan (UWMP) and the Project's water supply analysis. The UWMP was approved by AVEK in 2016 and was determined to meet all California Water Code requirements by the California Department of Water Resources (DWR) in March 2017. The Project water supply analysis is based on the UWMP analysis, including with regard to climate change impacts. The UWMP analyzed DWR's current Delivery Capability Report (DCR) and determined that of the scenarios presented in the DCR, the conservative Early Long Term (ELT) scenario was most appropriate for long-term estimates of future supply availability, because it is based on existing facilities, current operations, and regulatory constraints, with hydrology adjusted for expected climate change impacts. (Draft EIR Appendix 5.18-F, p. 6-1) The Draft EIR explains that the ELT scenario was chosen because of its substantial climate change analysis. (Draft EIR, pages 5.18-27, -28; Draft EIR Appendix 5.19-A, page 7-7). See Final EIR, responses to Comments F.8-212 and F.8-213 for further discussion of this topic, including more about climate change analysis in the ELT scenario. The Project's water supply analysis appropriately takes potential climate change impacts into account, and the Commenter provides no contrary evidence. No further response is required.

The Commenter asks whether the Project will use groundwater, and how it will be managed. The Project will use groundwater, and use is subject to strict management. Project groundwater use must comply with the Antelope Valley Basin Adjudication Judgment and Physical Solution ("Adjudication"). (Draft EIR, Appendix 5.18-D) The Adjudication was approved to sustainably manage Antelope Valley groundwater resources over time. Groundwater use consistent with the Adjudication takes account of and avoids potential long-term, cumulative impacts to the Antelope Valley Basin. Per Section 1.5 of the Adjudication, the basin's safe yield is 110,000 acre-feet per year. Per Section 3.5.43 of the Adjudication, safe yield is the amount of annual extractions of water from the basin over time equal to the amount of water needed to recharge the groundwater aquifer and maintain it in equilibrium, plus any temporary surplus. Per Section 3.4 of the Adjudication, the physical solution governs groundwater, imported water and basin storage space to ensure that the basin supports existing and future reasonable and beneficial uses. Exhibit 4 to the Adjudication allocates overlying production rights in amounts consistent with sustainable yield and provides that, after a seven-year rampdown period applicable to all users, the Tejon Ranch Company has an overlying production right of 1,634 acre feet per year, all of which will be provided to and utilized by the Project. The Project's groundwater use will be limited to this allocation. For further discussion of Project groundwater use and the Adjudication, see Final EIR, response to Comment J.1-10. With regard to groundwater recharge, the Project has been designed to maximize recharge opportunities, with low impact development stormwater management techniques to promote recharge, as required by MM 4-1. (Final EIR, pages 3-6, 3-108)

With regard to the Commenter's suggestion that the Project be required to demonstrate "water neutrality", this suggestion is noted and will be provided to the Regional Planning Commission and the Board of Supervisors for their consideration. Centennial has proposed a "Net Zero Water" program, which is also required by the project features included in the Specific Plan and the mitigation measures included in the Environmental Impact Report (EIR). There are several elements in this program, which collectively result in the project creating its own water supply rather than using water supplies owned or controlled by other water agencies in the region. Centennial's water supplies include imported water, an adjudicated amount of groundwater based on the project site, historic agricultural water use, a comprehensive advanced wastewater treatment program to ensure reclaimed recycled water for outdoor irrigation and other authorized uses, and a water banking program to store ample amounts of water to meet project needs during multi-year drought conditions." With regard to the request that vegetation and ecosystems adapted to the existing water regime be preserved as part of the Project, the Landscape Plan included in the Centennial Specific Plan requires a water-wise, regionally appropriate landscape to enhance and/or complement native habitat, with the use of native, drought-tolerant plants identified in a plant palette specifically tailored to the unique high desert environmental conditions. (See Final EIR, Appendix 4.0-A.Rev, Centennial Specific Plan [Revised], pages 3-29 to 3-50.) The Commenter does not provide a more specific request for water-related revisions to the Project or the EIR, and no further response is required.

Response to Comment ADD-G.45-5:

Resources

With regard to the Commenter's general concern about resource use for Project construction, this comment will be provided to the Regional Planning Commission and the Board of Supervisors, but the lead agency notes that resource demand is common to all development projects, and is a common attribute of residing, working, or producing goods or services in California. Further, the Project is subject to a myriad of energy efficiency and green development regulations and requirements incorporated into Project design and mitigation measures. For example, the Centennial Green Development Program's Green Building component requires all Project development to comply with CALGreen Code Mandatory Measures and voluntary CALGreen Tier 1 measures, and to comply with the Los Angeles Green Building Ordinances. Additional measures are also included to further improve energy, water, and material management conservation and efficiency, and to assure healthy building materials and designs. Please see Final EIR, response to Comment F.8-204 for further discussion of this topic. With regard to potential limits on the availability of sand as a construction material, the Commenter's statement is noted for the record and will be provided to the Regional Planning Commission and Board of Supervisors for consideration. The lead agency acknowledges that all new development, including the Project, is subject to the availability of construction materials. To the extent the Commenter's concern is the source of sand and other materials, per MM 21-21, the Project Applicant/Developer shall require contractors to use locally available and recycled materials, provided such materials meet all applicable Building Code and other requirements, and are readily available and comparably priced to assure that such materials do not increase the cost and decrease the

affordability of housing or community infrastructure. (Final EIR, Appendix 2.0-C.Rev, page C-164) The Commenter does not raise a specific concern about the sufficiency of the EIR, and no further response is required.

With regard to the assertion that impacts for the full lifecycle of Project materials should be incorporated into analysis of the Project's GHG emissions, the lead agency responds that the full lifecycle of Project materials falls outside the scope of Project impacts as defined by CEQA, and therefore has determined that such study is not appropriate. What CEQA requires is analysis and mitigation of "either a direct physical change in the environment, or a *reasonably foreseeable indirect physical change* in the environment." (Pub. Res. Code § 21065, emphasis added). The entire "lifecycle" of a product is not a well-defined concept, and there is no common methodology for the analysis of lifecycle impacts – such analysis would therefore be unduly speculative and is outside the scope of what is considered "reasonably foreseeable". For this very reason, the Office of Planning and Research removed the term "life cycle" from proposed CEQA Guidelines on GHG analysis in 2009.[3311] Moreover, the California Supreme Court has expressly found that CEQA does not require EIRs to include a life cycle analysis of a project's potential environmental effects [*Save the Plastic Coalition v. City of Manhattan Beach* (2011) 52 Cal.4th 155, 173 (CEQA does not require an agency "to conduct an exhaustive analysis of all conceivable impacts a project may have in areas outside its geographical boundaries")]. For further discussion of life cycle analysis, see Final EIR, response to Comment F.8-191. With regard to the foreseeable GHG emission impacts associated with construction-related transportation, such impacts have appropriately been incorporated into the Project's GHG emission analysis. (Draft EIR, Section 5.21, Climate Change, pages 5.21-50, -51, and Draft EIR Appendix 5.11-A)

With regard to potential impacts occurring at the locations from which Project materials are sourced, this comment is noted for the record and will be provided to the Regional Planning Commission and Board of Supervisors for consideration. However, CEQA does not require the consideration of every remote, potential Project-related impact that could arise in other locations. Rather, as required by CEQA, the EIR limits its analysis to the scope of the Project and its impacts on the environment as defined by CEQA. CEQA defines the "project" as any activity which may cause either a direct physical change in the environment, or a *reasonably foreseeable indirect physical change* in the environment; the "environment" is defined as the physical conditions that exist *within the area which will be affected by the proposed project*. (Pub. Res. Code §§ 21060.5, 21065, emphasis added) Therefore, the EIR appropriately limits its analysis to direct physical changes and reasonably foreseeable indirect changes on the Project site and the surrounding area. Analysis of potential impacts at the source of Project materials would be unduly speculative and outside the scope of the Project and its reasonably foreseeable impacts as defined by CEQA.

Addressing the Commenter's GHG emission offsets question, as explained in the EIR, the Project does not rely on GHG offsets to mitigate Project impacts related to GHG emissions not otherwise covered by California's cap-and-trade program. See Draft EIR, Section 5.21,

[3311] California Natural Resources Agency, Final Statement of Reasons for Regulatory Action Pursuant to SB97, December 2009.

Climate Change, and Final EIR, responses to Comments F.8-83, F.8-88, F.8-95, and F.8-204 for further discussion of the Project's aggressive means of reducing GHG emissions and the use of offsets.

Response to Comment ADD-G.45-6:

Fire

With regard to the Commenter's concerns about increased demand for firefighting services, the Commenter's concerns will be passed on to the Regional Planning Commission and Board of Supervisors. However, the Project EIR has adequately analyzed potential impacts and appropriately concludes that impacts will be less than significant after mitigation. First, Draft EIR Section 5.16, Fire and Law Enforcement Services, acknowledges that the Project would create demands for fire protection. MM 16-1 requires that response times to the Project site shall be 5 minutes or less for fire service responses. The Project would therefore include the construction of up to four on-site fire stations to meet increased demand in the established response times (MMs 16-1 through 16-3). As indicated by the Los Angeles County Fire Department, these fire stations would provide the necessary fire protection services to the Project and thus, impacts on fire protection services would be less than significant after mitigation. See also Final EIR, responses to Comments F.3A-64, F.7-18, and F.8-62 for further discussion of this topic.

With regard to increased fire risk, the EIR appropriately recognizes potential fire risks and adequately analyzes the impact of introducing urban development, specifically the Project as designed, into an area subject to wildfire, concluding that the Project would comply with regulatory requirements and incorporates mitigation measures that would reduce impacts to a less than significant level. (Draft EIR, Section 5.3, Hazards and Fire Safety, pages 5.3-35 to 5.3-39) As noted in the EIR, the Project site is located in an area designated as a Fire Hazard Severity Zone by the California Department of Forestry and Fire Protection. (Draft EIR, Appendix 5.19-A, page 5.3-30) The majority of the Project site is either within a Very High Fire Hazard Severity Zone (VHFHSZ) or High Fire Hazard Severity Zone (HFHSZ), while the eastern edge of the Project site is within the Moderate Fire Hazard Severity Zone (MFHSZ). (Final EIR, page 3-103) The Draft EIR determines that, with implementation of MM 3-9, Project impacts related to fire hazards would be less than significant under the applicable thresholds of significance. This determination, however, does not rely solely upon implementation of MM 3-9 or other mitigation measures. Rather, the Draft EIR concludes that Project impacts related to fire safety would be less than significant only after taking into consideration (i) Project site access, (ii) Project site water flows, (iii) Project site topography, (iv) Project site vegetative cover, (v) existing and proposed regulatory controls, (vi) existing mutual aid agreements between federal, state, and local fire safety service providers, and (vii) Project improvements and mitigation measures related to landscaping and vegetation management, building construction, circulation, public utilities, and fire protections services, including but not limited to MM 3-9. For further discussion, see Draft EIR, pages 5.3-35 to -39; Final EIR, responses to Comments F.8-63 and F.8-64. With regard to the exact location of Fire Hazard Severity Zones on the Project site, an updated EIR Exhibit 5.3-2, Fire Hazard Severity Zones, was unintentionally omitted from the Final EIR, and is hereby incorporated

into the Final EIR, Section 3.0, Draft EIR Clarifications and Revisions, after page 3-103 – it appears in Appendix D to this document.

With regard to the concern about fire service costs, as stated on Draft EIR page 5.16-5, the County's Developer Fee Program was adopted specifically to fund the purchase of fire station sites; the construction of new stations and facility improvements; and the purchase of equipment. Prior to the construction of the first on-site fire station, the Project would pay developer fees, which may be used for the construction of facility improvements and the purchase of equipment needed at Fire Station 77. MM 16-2 on page Draft EIR page 5.16-16 allows the Applicant to enter into a program where the Applicant provides the land and constructs and equips the fire stations in exchange for credit towards the fee payments. MM 16-3 states that the Applicant would provide the land for, and construct and equip, up to four new fire stations to serve the Project. The fire station operating and staffing costs would be funded by property tax revenues from the Project. Impacts on fire protection services would be less than significant after mitigation. The Commenter provides no evidence to the contrary and does not specifically question the adequacy of the EIR with regard to fire risk and fire services. No further response is required.

Response to Comment ADD-G.45-7:

Fiscal Impacts and Externalities

With regard to the assertion that the Project will be fiscally subsidized by existing urban areas, the Commenter provides no evidence to support this unfounded assertion. The Project and the construction of related infrastructure will be appropriately funded, and it is specifically a Project objective to "Ensure that all Project site infrastructure and public services are funded by the Project to avoid creating any financial obligations on existing residents and other taxpayers." (Draft EIR, Section 4.0, Project Description, page 4-4) To provide just two examples of how the Project will carry out this objective:

- The proposed Centennial Transportation Improvement Program Agreement provides a mechanism for transportation-related improvements to be implemented by providing advance funding for planning, design, and construction of certain improvements and establishing a funding program to collect fair shares for other improvements. (Draft EIR, Section 7.0 Cumulative Impacts, page 7-19)
- As discussed in Specific Plan Appendix 2-C, the Project Mobility Plan requires the formation and funding of a TMA to promote, manage, and monitor transit and mobility services and infrastructure prior to the issuance of the first occupancy permit for the Project. (Final EIR, page 2-503; Final EIR, Appendix 2-C to Appendix 4.0-A)

The Commenter provides no evidence to support its assertion, and no further response is required. Further, please note that the fiscal impact of the Project is purely a socioeconomic impact not related to adequacy of the EIR. CEQA Guidelines Section 15064(e).

With regard to the related assertions that the Project constitutes sprawl, is not a healthy walkable community, undermines the goals of SB 375, and "violates the spirit of sustainability", the Commenter provides no evidence for these assertions, and the lead agency disagrees. With regard to the County's "underutilized parcels", construction of the Project is not incompatible with the use of those parcels for multi-family development. While the lead agency acknowledges the benefits of infill development listed by the Commenter, the EIR extensively documents the sustainable and walkable nature of the Project, and clearly explains that the Project represents the culmination of a long-term, comprehensive regional and local planning process designed to accommodate anticipated growth in the Antelope Valley while also protecting the Antelope Valley's valuable open space and agricultural resources. The Project has been situated and designed to promote regional "smart growth" planning principles established by the SCAG 2016-2040 RTP/SCS (per SB 375) and the AVAP for the purpose of sustainably accommodating regional growth projections in a manner that reduces pollutant and GHG emissions and promotes public health. (Draft EIR, pages 4-3 to -15; 5.8-1 to -11, -19 to -74; 5.9-1 to -21, -23 to -31; 8-4) Further, as part of the Project's overall transportation demand management (TDM) strategy to reduce the dependence on the private automobile, which would result in a consequential reduction in overall volume of Project-generated trips off site, the Project Applicant will be required to participate in or form a Transportation Management Association (TMA) to serve the residents and employees of businesses within the Project area or will be organized in conjunction with an existing organization in the Antelope Valley or Santa Clarita area. Regional and local agencies report successful implementation of the types of TDM measures that the TMA would consider to meet the standards set forth in MM 10-25, and which are listed in Table 2-C-2 of the Specific Plan's Mobility Plan (Appendix 2-C to Final EIR Appendix 4.0-A.Rev).[3312],[3313],[3314] For further discussion, please also see Final EIR, responses to Comments F.8-20 and F.8-72 (in-depth refutation of the assertion that the Project is "sprawl"), and F.8-204 (in-depth discussion of the Project's walkable and sustainable design and features).

With regard to whether the Project's economic benefits will offset its costs, the Commenter's concerns are noted for the record and will be provided to the Regional Planning Commission and Board of Supervisors for consideration. However, the cost of a Project is a socioeconomic impact and not a physical impact on the environment that must be considered under CEQA. Given that this comment does not address a concern specific to CEQA or the EIR, no further response is required. Nonetheless, the lead agency notes that the Project will provide significant net economic benefits to Los Angeles County, including expected annual revenues of $3,394,902.00, versus $21,827,596.00 of annual costs to the County's General Fund for re-occurring public services, representing an annual net benefit to the General Fund of about $21,567,306.00. The Project will also generate an estimated $22,328,502.00 of property tax revenues. Further, an estimated 23,675 permanent jobs would be created by Project uses,

[3312] Neil Peacock, District 3 Corridor Planning Manager, Caltrans. Sacramento-Area Regional VMT Mitigation Opportunities: Bike share and Microtransit First/Last Mile Accessibility Solutions.

[3313] Devon Deming, Los Angeles County Metropolitan Transportation Authority. Sponsorship of Specialized Pass Programs.

[3314] David Somers, Los Angeles Department of Transportation. Reducing vehicle miles in the region by investing in Transportation Management Organizations. Proposal for SCAG VMT Exchange Study. June 14, 2018.

with about 25,000 construction jobs. See the Draft Statement of Overriding Considerations, available at http://planning.lacounty.gov/assets/upl/case/sp_02-232_pm060022-20180711-attG4.pdf, for further discussion.

With regard to the assertion that the Project will fragment habitat, the Commenter's opinion is noted for the record, but based on extensive regional and Project-specific analysis documented in the EIR, the lead agency disagrees. Species expected to use the internal open space areas following Project buildout are expected to consist predominantly of common urban- and suburban-adapted species, which persist in these environments regardless of typical barriers by using streets and green space areas. The Project has been designed to include green space connections between undeveloped open space areas where feasible for increased species mobility. The Project only fragments the natural open space areas within the development footprint, and remaining pockets of open space/parkland within the footprint are not essential for the persistence of regional native wildlife populations. Further, the Mitigation Preserve provides for a very large degree of connectivity and prevents future fragmentation through long-term dedication. The Project's impact on wildlife movement due to changes in mobility and habitat fragmentation is therefore considered less than significant. The Commenter provides no evidence to the contrary, and no further response is required. For further discussion, please see Draft EIR, Section 5.7, Biological Resources, pages 5.7-142 to -164, and Final EIR, responses to Comments F.8-108 and G.28-3.

Response to Comment ADD-G.45-8:

This comment reiterates many of the points made elsewhere in the Commenter's letter and expresses the opinion that the Project should not be approved. The Commenter's opinions regarding the Project are noted for the record and will be provided to the Regional Planning Commission and Board of Supervisors for consideration. With regard to sustainability and Project design, the assertion that the Project will be "subsidized", and habitat protection, see response to Comment ADD-G.45-7; with regard to the provision of water, see response to Comment ADD-G.45-4; with regard to GHG emissions and the Project's consistency with the state's "deep decarbonization path" (specifically with regard to SB 375), see responses to Comments ADD-G.45-5 and ADD-G.45-7. This comment does not make specific assertions about the adequacy of the EIR, and no further response is required.

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ADD-G-46

June 5, 2018

Dear Supervisors,

Please oppose the Centennial Specific Plan!

This plan will destroy the habitat of many California native plants and animals and turn thousands of acres of beauty into urban sprawl. This cannot keep happening!

California and Los Angeles County must stop encroaching on these wild lands. We do not have the water or resources to support these developments. Our roads are clogged and traffic is a nightmare creating more and more pollution to these lands and plants and animals. They must have space too! You cannot over development all these wild areas. California does not need to accommodate more and more people which we cannot support, when our current standard of living is being threatened and undermined daily. California will be ruined if you do not do your jobs and protect it. The current residents, animals, plants must all be taken into account and protected. If you keep filling up the boat with all this development you will be instrumental in the destruction of California.

ADD-G.46-1

We cannot afford to lose more precious native habitat to development we don't need or want! We need natural lands not more building. There are lots of other states that need people to live there, with lots of resources. You cannot ruin California to accommodate every developer and person who wants to live and take from California. We are an important state and we must be protected. Please do so and vote no on the Centennial Specific Plan.

Thank you.

Chris Van Hook

337 Via de la Paz

Pacific Palisades, Ca. 90272.

Response to Comment Letter ADD-G.46
Chris Van Hook
June 5, 2018

Response to Comment ADD-G.46-1:

Thank you for your participation in this public process. The Commenter's general opposition to the Project is noted for the record and these comments will be provided to the Regional Planning Commission and Board of Supervisors for consideration. With regard to topics generally addressed in this comment, please see Draft EIR, Section 5.7, Biological Resources, pages 5.7-142 to -164; Final EIR, responses to Comments F.8-108 and G.28-3 (habitat), F.8-20 and F.8-72 (sprawl and accommodation of anticipated regional growth that will occur with or without the Project), and F.8-212; response to Comment ADD-G.45-4 in this document (water supply); and Draft EIR, Section 5.10, Traffic Access and Circulation (transportation impacts). This comment does not make specific assertions about the adequacy of the EIR, and no further response is required.

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ENVIRONMENTAL HEALTH SCIENCES DEPT.
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June 26, 2018

Via Electronic Mail

Mr. Jodie Sackett
County of Los Angeles
Department of Regional Planning
Hall of Records, 13th Floor, Room 1348
320 West Temple Street
Los Angeles, CA 90012
jsackett@planning.lacounty.gov

Re: Centennial Project Final Environmental Impact Report

Dear Commissioners:

As an atmospheric chemist and air quality expert with 45 years of experience, who has extensively studied and described in more than 200 peer-reviewed journal articles the causes and impacts of poor air quality in Southern California communities, I am asking you to deny approval of the proposed Centennial project. Large-scale urban sprawl of this immense magnitude is not the way to meet the health-based ozone and fine particle air quality standards which continue to be routinely violated in this region, nor is it the way to reach the climate change mitigation goals of California. ADD-G.47-1

The proposed Centennial project is a massive 5,800-acre development more than 60 miles away from downtown areas. It will worsen air pollution by putting more cars on roads for long trips, which will intensify already-terrible traffic conditions while increasing emissions of air pollutants such as nitrogen oxides (NO_x), volatile organic compounds (VOCs), carbon monoxide, heavy metals, carbon dioxide and respirable particulate matter ($PM_{2.5}$). It will also lead to more ozone (O_3) production through the photochemical reactions of NOx and VOCs emitted by these vehicles. Short- and long-term exposure to several of these pollutants have been shown to have adverse health effects in humans and have been linked with premature mortality, compromised birth outcomes and a host of respiratory impacts. In addition, increased daily vehicle trips will result in more emissions of greenhouse gases (GHGs), including NO_x, carbon dioxide (CO_2), and methane (CH_4), which will, as noted above, counter California's climate change goals. ADD-G.47-2

The proposed project would be located at the boundary between the South Coast Air Basin (SoCAB) and the Mojave Desert Air Basin (MDAB). However, most vehicle trips ADD-G.47-3

associated with the project would occur within the SoCAB, as potential residents would likely commute between Centennial and either Santa Clarita (>30 miles away) or Los Angeles (>60 miles away). This is a major concern because the SoCAB already suffers from high levels of air pollution. Despite decades-long efforts to reduce air pollutant emissions, the SoCAB still fails to meet federal (or state) air quality standards, specifically the national ambient air quality standards for 8-hour O_3, 1-hour O_3, annual-averaged $PM_{2.5}$, or 24-hour $PM_{2.5}$.

ADD-G.47-3 (cont'd)

A combination of unique topography (the SoCAB is surrounded by high mountains and the coast), adverse meteorology that results in low mixing layers and limited dispersal, and the emissions from millions of vehicles on the road due to daily commuters and the goods movement industry make the SoCAB the worst area of O_3 pollution in the nation. According to the South Coast Air Quality Management District (SCAQMD), in 2012 mobile sources contributed almost 90% of the region's total NO_x emissions. Obviously, we cannot control the topography or meteorology of this area, but we can (and must) change our behavior to reduce vehicle emissions if we are serious about improving air quality in Los Angeles County.

ADD-G.47-4

Approving developments like Centennial will only exacerbate a wide range of health effects due to air pollution in this region. If LA County is truly committed to keeping its residents healthy, and to combatting climate change, then we need to redefine how we design and plan our cities and move away from the massive urban sprawl and resulting adverse air quality impacts inherent in this Centennial project.

ADD-G.47-5

Thank you for your consideration.

Cordially,

Arthur Winer, PhD
Distinguished Emeritus Professor, UCLA Fielding School of Public Health
Director Emeritus, UCLA Environmental Science and Engineering Program
Associate Director Emeritus, UCLA Institute of Environment and Sustainability

Response to Comment Letter ADD-G.47
Arthur Winer, PhD
June 26, 2018

Response to Comment ADD-G.47-1:

Thank you for your participation in this public process. The Commenter's opposition to the Project and all comments provided in the Commenter's letter will be provided to the Regional Planning Commission and Board of Supervisors for consideration. For a discussion of climate change impacts and the Project's consistency with regional and state emission reduction goals, as well as a detailed refutation of the assertion that the Project constitutes sprawl, see Final EIR, responses to Comments F.8-20, F.8-72, F.8-79, F.8-80, and F.8-204. With regard to air quality, the lead agency disagrees with the Commenter's general assertion, and notes that the South Coast Air Quality Management District (SCAQMD) submitted a letter to the County, dated July 13, 2017, indicating that it reviewed the Draft EIR and determined that the Project "exemplifies the [County's] leadership in promoting sustainable communities" and that it "supports the goals" of SCAQMD's 2016 Air Quality Management Plan (AQMP) and "will help reduce emissions from mobile sources, protect the public health from air pollution, and achieve healthful air in the Basin" (see Comment D.4-2). In addition, the Antelope Valley Air Quality Management District (AVAQMD) submitted a letter to the County, dated May 26, 2017, indicating that it reviewed and had no comments on the Draft EIR (see Comment Letter D.1). See also Final EIR, responses to Comments F.8-188 through F.8-205 for further discussion of air resource impacts. This comment does not make specific assertions about the adequacy of the EIR, and no further response is required.

Response to Comment ADD-G.47-2:

This comment's assertion regarding the potential health effects of air pollution is noted. The Draft EIR discloses and describes in detail the potential health effects of each criteria pollutant on pages 5.11-3 through 5.11-11 and analyzes the potential health impacts of criteria pollutant emissions on sensitive receptors in Draft EIR Section 5.11, Air Resources, at pages 5.11-21 through 5.11-22, 5.11-3 through 5.11-37, 5.11-63 through 5.11-64, 5.11-68 through 5.11-74, and 7-20. See also Final EIR, responses to Comments F.8-188 through F.8-205 for further discussion of air resource impacts. With regard to climate change, see also response to Comment ADD-G.47-1 in this document. This comment does not make specific assertions about the adequacy of the EIR, and no further response is required.

Response to Comment ADD-G.47-3:

As noted by the Commenter and discussed in the EIR, the Project site straddles the South Coast and Mojave Desert air basins and both basins are designated non-attainment for certain state and federal air quality standards, including for particulate matter and ozone. (Draft EIR, page 5.11-24 and -25) The EIR thoroughly and appropriately analyzes potential air resource impacts, including the South Coast Air Basin, and mitigates impacts to the greatest extent feasible. As discussed in Final EIR, Comment D.4-2, SCAQMD has reviewed

the Draft EIR and determined that the Project "supports the goals of the 2016 AQMP and will help reduce emissions from mobile sources, protect public health from air pollution, and achieve healthful air in the Basin." As discussed in Comment D.1-1, the Antelope Valley Air Quality Management District has reviewed, and has no comments on, the Draft EIR. See also Final EIR, responses to Comments F.8-188 through F.8-205 for further discussion of air resource impacts. This comment does not make specific assertions about the adequacy of the EIR, and no further response is required.

Response to Comment ADD-G.47-4:

The Commenter's description of the South Coast Air Basin and opinion regarding the reduction of vehicle emissions is noted for the record. The Project has been designed using smart growth principles to reduce vehicle miles traveled and vehicle emissions. It is consistent with regional planning efforts as further discussed in Final EIR, response to Comment F.8-20, and as noted in responses to Comments G.47-1 and G.47-3, the SCAQMD has determined that the Project "exemplifies the [County's] leadership in promoting sustainable communities" and that it "supports the goals" of SCAQMD's 2016 Air Quality Management Plan (AQMP) and "will help reduce emissions from mobile sources, protect the public health from air pollution, and achieve healthful air in the Basin" (see Comment D.4-2).

Response to Comment ADD-G.47-5:

This comment reiterates assertions made in the Commenter's letter. See responses to Comments ADD-G.47 through ADD-G.47-4. See also Final EIR, responses to Comments F.8-20, F.8-72, F.8-79, F.8-80, and F.8-204 for further discussion of these topics and refutation of the Commenter's opinion. This comment does not make specific assertions about the adequacy of the EIR, and no further response is required.

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28 June 2018

Department of Regional Planning for Los Angeles County
Room 150
320 West Temple Street
Los Angeles, California 90012

Dear Members of the Department of Regional Planning for Los Angeles County:

In February 2014, I saw something I never expected to see in my lifetime, California condors! They were soaring off in the distance along the southeast side of the Tehachapi Mountains. We saw them from a high point on Tejon Ranch on a day I was given a special tour of the property. Since it was still early in a season following many years of severe drought, I was unable to see the magnificent display of wildflowers on the ranch, but from photos of the area it was obvious that Tejon Ranch can exhibit one of the world's most spectacular floral displays following wet winters. ADD-G.48-1

I have been a botanist for 48 years and have participated in extensive field studies in China, Japan and other Asian countries and in eastern North America (and less so in western North America) and have visited temperate areas of high biodiversity in South Africa, Australia and Madagascar and can easily say that none of those areas exceeds California in the uniqueness and importance of its flora and fauna. In nearly all of Asia, particularly in China, there are no areas that have escaped the influence of humans. The biodiversity of Madagascar is seriously threatened by a growing population and extreme poverty, which results in the over-exploitation of natural resources. Large areas of western Australia and some areas in South Africa are fairly well protected, but on a worldwide scale, those areas of exceptional biodiversity represent only a tiny portion of the earth's surface, and none of them share any of the plants and animals that occur only in California, which is so unique that it has been given its own scientific designation as the California Floristic Province. ADD-G.48-2

The 270,000 acres of Tejon Ranch may seem like a huge area, but it is only fraction of the 100 million acres of the state of California. To keep Tejon Ranch free from development would not only further California's role as the leader for the environment in the United States, but it would preserve a unique, worldwide, biological treasure. ADD-G.48-3

Benefits of Keeping Tejon Ranch intact

Preserving some of the finest native grasslands in Southern California and one of the finest spring wildflower displays in the world.

Insuring the connection and uninterrupted transition between ecologically significant habitats. Habitat connections are necessary given the reality of global climate change.

Preserving habitats for rare and common plant and animal species

ADD-G.48-4

Problems to be expected from development

Urban sprawl ADD-G.48-5

Long commutes and more cars on California's highways
Pollution and additional greenhouse gas emissions
Severed habitat corridors
Local extirpation of plants and animals
Loss of ability for plants and animals to migrate uninterruptedly

ADD-G.48-5 (cont'd)

For those members of the Department of Regional Planning for Los Angeles County who have not visited Tejon Ranch, or who know little about its wildlife, I urge you to visit Tejon Ranch in a good wildflower year, or to search for photos of the area taken during the peak of wildflower bloom. This is not a special place for just California, but for the whole country and for the world. I hope you will do all you can to preserve intact this unique and one of the most beautiful and biologically significant parts of our country. Thank you for reading my message and for your consideration.

ADD-G.48-6

Respectfully,

David E. Boufford
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Response to Comment Letter ADD-G.48
David E. Boufford
June 28, 2018

Response to Comment ADD-G.48-1:

Thank you for your participation in this public process. These comments will be provided to the Regional Planning Commission and Board of Supervisors for consideration. As noted by the Commenter and appropriately discussed in the EIR, California condor have the potential to occur in the Project region and have been observed on the Project site. The Draft EIR concludes that Project implementation is not expected to result in significant adverse impacts on this species. However, MM 7-6 is included to further ensure that the proposed Project does not result in future impacts on the California condor. For further discussion regarding the California condor, see Draft EIR, Section 5.7, Biological Resources, pages 5.7-118 to -120, -145, -148, and Final EIR, responses to Comments A.3-3, B.4-21 through B.4-23, and F.8-138 through F.8-143. With regard to wildflowers, the EIR appropriately discusses their presence on the Project site, and potentially significant impacts to wildflower fields and other special status vegetation types that would result from implementation of the Project would be reduced to less than significant levels with implementation of MM 7-10. For further discussion of wildflowers on the Project site and potential impacts, see Draft EIR, Section 5.7 Biological Resources, pages 5.7-1, -11, -24, -26, -31, -40 to -44, -66, -158 to -160, -162 to -164, and Final EIR, responses to Comments F.8-114, F.8-119, F.8-123 to F.8-125, F.8-127, and H.21-1, and Section 3.0, pages 3-32 and 3-33. This comment does not make specific assertions about the Project or adequacy of the EIR, and no further response is required.

Response to Comment ADD-G.48-2:

This comment provides background on the Commenter, and information regarding the flora and fauna in other nations as compared to the State of California. This comment is noted for the record and will be provided to the Regional Planning Commission and Board of Supervisors for consideration. This comment does not specifically address the Project or adequacy of the EIR, and no further response is required.

Response to Comment ADD-G.48-3:

The Commenter's opinion regarding the preservation of Tejon Ranch is noted for the record and will be provided to the Regional Planning Commission and Board of Supervisors. The vast majority of Tejon Ranch is to be conserved in perpetuity, and the Project has been designed to maximize open space and habitat/species protection. As noted in the EIR, on June 17, 2008, Tejon Ranch Company (TRC) entered into a Conservation and Land Use Agreement (Ranchwide Agreement) with Audubon California, the Endangered Habitats League, Natural Resources Defense Council, Planning and Conservation League and Sierra Club (Resource Groups) and the nonprofit Tejon Ranch Conservancy (Conservancy), which allows TRC and its development partners to pursue approvals for development of agreed-upon portions of the Tejon Ranch, including the Project site, without opposition from the

Resource Groups, while providing for the designation of Project open spaces and the dedication or sale of conservation easements over approximately 240,000 acres, or approximately 90 percent, of the 270,000-acre ranch. Of the 12,323-acre Project site, approximately 5,624 acres (or 45.6 percent) are proposed for open space for natural resource protection and greenways. Further, preservation of the entire Project site would impede regional planning goals, including with regard to addressing the region's critical housing needs, and would undermine the implementation of the SCAG 2016-2040 RTP/SCS and compliance with SB 375. This comment does not specifically address the Project or adequacy of the EIR, and no further response is required.

Response to Comment ADD-G.48-4:

The Commenter's opinions regarding benefits of conservation are noted for the record and will be provided to the Regional Planning Commission and Board of Supervisors. As more fully discussed in Draft EIR, Section 5.7, Biological Resources, above in response to Comment ADD-G.48-3, and in Final EIR, response to Comment F.8-20, the Project has been designed to accommodate anticipated growth while maximizing conservation and ensuring that potential impacts to plants and wildlife species are mitigated to the maximum extent feasible. This comment does not specifically address the Project or the adequacy of the EIR, and no further response is required.

Response to Comment ADD-G.48-5:

The Commenter's opinions regarding potential development impacts are noted for the record and will be provided to the Regional Planning Commission and Board of Supervisors. The EIR thoroughly and appropriately addresses all of the listed potential impacts in this comments, including with regard to Project siting and urban sprawl (Draft EIR, Section 5.8, Land Use, and Final EIR, response to Comment F.8-20 and F.8-72); greenhouse gas emissions (Draft EIR, Section 5.21, Climate Change, and Final EIR, responses to Comments F.8-79 through F.8-97 and F.8-204); habitat corridors and connectivity, and wildlife movement (Draft EIR, Section 5.7, Biological Resources, pages 5.7-164 to 5.7-170 and Final EIR, responses to Comments B.4-36, B.4-56, B.4-57, F.3-23, F.3-25, F.3A-32, F.5-2 through F.5-7, F.8-109, F.8-110, F.8-172, and J.1-12); and potential impacts to flora and fauna more generally (Draft EIR, Section 5.7, Biological Resources). This comment does not specifically address the Project or adequacy of the EIR, and no further response is required.

Response to Comment ADD-G.48-6:

The Commenter's suggestion is noted for the record and will be provided to the Regional Planning Commission and Board of Supervisors. This comment does not address the Project or the adequacy of the EIR, and no further response is required.

3.4 RESPONSES TO PUBLIC TESTIMONY GIVEN AT JUNE 11, 2018 REGIONAL PLANNING COMMISSION HEARING

Testimony No.	Environmental Topic	Testimony	Response to Testimony
Kathleen Trinity			
RPC-132	Introduction	Good morning, Chairman Louie and Commissioners. I'm Kathleen Trinity from Acton. And I'm opposed to the plan. I realize that a lot of time and effort has gone into the Centennial Plan, the DEIR and the FEIR. At the County level, the environment is neatly divided into planned sectors, and in CEQA habitat and wildlife are referred to as biological resources, that is, for human use.	Thank you for your participation in this public process. The Commenter's opposition to the Project is noted, has been heard in testimony by the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. The EIR appropriately analyzes and mitigates potential Project-related impacts to biological resources to the greatest extent feasible, and the Project Applicant has committed to preserving much of Tejon Ranch for the benefit of species and habitat conservation. This comment does not specifically address the adequacy of the EIR and, therefore, no further response is required.
RPC-133	Biology	But as human beings, we also have an obligation and a desire, I would think, to preserve and protect our natural areas and wildlife. We need to stand back and be extremely cautious because this massive urban development will, first, forever change the nature of the area and, second, will compromise the area, not only unique in flora and fauna, but because it is located between the Tehachapi Mountains and the San Gabriels and the Antelope Valley. This location between mountain ranges is key to providing essential linkages for wildlife movements between ranges and roaming within them.	The Commenter's opinion regarding the nature of the Project is noted, was heard in testimony by the Regional Planning Commission, and will be provided to the Board of Supervisors. The EIR appropriately analyzes potential impacts to habitat connectivity, and the Project design and mitigation would ensure less than significant impacts. In the wildlife movement assessment, connectivity between the Tehachapi Mountains and the San Gabriel Mountains was considered in detail (Draft EIR, pages 5.7-50 to -64, -164 to -170). The thorough assessment concluded that although maintaining baseline connectivity between the two regions is essential, development of the Project would not significantly impact movement between these regions (*Id.*, page 5.7-166). The wildlife movement impact analysis beginning on page Draft EIR page 5.7-164 does conclude that development of the Project site will result in some losses of areas that may be used for foraging and/or breeding for species; pathways to or from foraging or breeding grounds on the Project site, such as along ridge-lines or canyon bottoms, may become "dead ends" to through dispersal. However, these losses are not expected to significantly impact wildlife movement, and sufficient habitat connectivity would be retained in the region for these species, especially given the substantial amount of similar terrain in the northwestern Antelope Valley area. Further, two regional conservation plans, the Tejon Ranch Conservation and Land Use Agreement and the TUMSHCP, although not providing mitigation for Centennial, would act in concert with the Centennial mitigation preserves to help sustain the

Testimony No.	Environmental Topic	Testimony	Response to Testimony
			functionality of the regional landscape linkage for future wildlife populations. Multi-generational gene flow (a series of connected wildlife movement events over time, allowing for genes to pass within and between populations) among wildlife populations in the region is expected to be sustained in the open spaces on and off the site that will remain following Project implementation. These open spaces provide sufficient habitat connectivity to allow for such gene flow. Implementation of MM 7-14, which designates a SR-138 wildlife underpass (along with a 50-foot open space buffer) where the current intersection with National Cement Plant Road exists, will also allow for local wildlife movement to pass through the Project area down to SEA 17. The direct impacts of Project development on wildlife movement, therefore, are considered less than significant after mitigation for local wildlife movement impacts. Nonetheless, the Draft EIR (page 7-17) discloses that the Project when combined with other projects in the region would result in a cumulatively significant impact on wildlife movement. Lastly, the Project design is consistent with the Antelope Valley Area Plan (AVAP) including with regard to open space designations, SEA protection, and preservation of habitat linkages. For further discussion of wildlife movement and habitat connectivity, please see Final EIR, responses to Comments B.2-3, B.4-34 to B.4-37, B.4-56, B.4-57, B.4-75, F.3-23 to F.3-25, F.3A-32 to F.3A-34, F.5-2, F.7-22, F.8-109, F.8-110, and F.8-165 through F.8-169.
RPC-134	Biology	An urban development of 57,000 persons, planned community or not, will deprive wildlife, such as mountain lions, pronghorn antelope, mule deer, and others of habitat and healthy movement. Large animals are already hemmed in by the I-5, the SR-138, and the California Aqueduct. An overpass at the aqueduct and an underpass at the SR-138, while helpful, are totally inadequate, incapable of mimicking nature.	With regard to wildlife movement, please see Response to Testimony RPC-133. With regard to habitat loss, the EIR acknowledges that Project development would result in loss of habitat. The EIR assesses impacts to habitat for all species at the Project and cumulative impact levels, including those mentioned by the Commenter. Various mitigation measures, including the dedication of thousands of acres of open space to be preserved and managed in perpetuity are included in the EIR and the Project's MMRP to reduce impacts to habitat to a less than significant level. For further discussion regarding habitat loss, please see Draft EIR, Section 5.7, Biological Resources, pages 5.7-145 to -153, and Section 7.0, Cumulative Impacts, page 7-6; Final EIR, responses to Comments F.8-107, F.8-108. Specifically, with regard to mountain lions and other large mammals, please see Responses to Testimony RPC-7, -135, and -136, Draft EIR, Section 5.7, Biological Resources, pages 5.7-50 to -54, -63 to -65, -161, -166, and Final EIR, responses to Comments B.4-53 and F.5-8. With regard to pronghorn, please see Response to Testimony RPC-296.

Testimony No.	Environmental Topic	Testimony	Response to Testimony
RPC-135	Biology	How many deer and bear do we need to see slaughtered on the highways and freeways. I see skimpy mention of the California mountain lion in the DEIR. Its need for roaming land and linkages are not addressed. This is a serious omission without which the project should not go forward. Mountain lions require vast roaming areas and do not always remain in the Foothills. Hundreds of mountain lions are killed in California each year. Many are forced out of the Foothills in search of food and water only to be deemed a threat and shot.	The EIR appropriately addresses potential impacts to all protected species or if Project impacts would reduce regional populations to below self-sustaining levels. Mammals mentioned by Commenter would not experience significant impacts in either regard. In addition, the primary areas of regional movement are identified in the EIR, consistent with independent studies, as occurring outside the Project site. Local wildlife movement impacts have been reduced to less than significant with the incorporation of mitigation measures. Regional movement for the species listed by the Commenter is not expected to be significantly impacted. With regard to human intervention with large mammals including bear and mountain lions, the Final EIR updated MM 7-17 to require educational materials be distributed that address these large native mammals, indicating they could prey on pets, indicating that no action shall be taken against such native animals, and indicating that pets must be leashed while using designated trail system and/or in any areas within or adjacent to open space, to reduce interaction. Control of stray and feral cats and dogs will be conducted in open space areas on an as-needed basis. See Appendix 2.0-C.Rev to the Final EIR, page C-81. For further discussion regarding these mammals, please see Draft EIR, Section 5.7, Biological Resources, pages 5.7-50 to -54, -63 to -65, -161, and -166, and Final EIR, responses to Comments B.4-53 and F.5-8.
RPC-136	Biology	In the February 2012 L.A. Times, it was reported that Tejon Ranch had illegally killed 11 to 20 mountain lions to keep them away from wealthy hunters' quarry. Even if Tejon has since reduced its hunting program, mountain lions should not end up on cramped islands like P35 to the south. And consider additional deaths on freeways and highways.	With regard to potential Project-related impacts to mountain lion and appropriate EIR analysis of same, see Response to Testimony RPC-135. With regard to illegal killing of mountain lions, it is not Tejon Ranch policy to do so. As indicated in the article referenced by the Commenter, the Applicant has publicly explained that it expresses "deep regret that such incidents took place on ranch property and the company is doing everything within its power to ensure that something like this never happens again." Further, the killings "occurred without the knowledge and/or consent of Tejon Ranch's senior officers." This testimony does not address the adequacy of the EIR, and no further response is required.
RPC-137	Conclusion	A planned community has many advantages. But at this location, it will certainly not be advantageous to wildlife, nor is this acceptable. Thank you.	The Commenter's opinion regarding Project location has been heard in testimony by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR and, therefore, no further response is required.
Jacqueline Ayre			
RPC-138	Introduction	Hello. My name is Jacqueline Ayre. I'm here on behalf of Save Our Rural Town.	Thank you for your participation in this public process. The Regional Planning Commission heard this testimony and will consider it. It will also be passed on to the Board of Supervisors for consideration. The comment letter

Testimony No.	Environmental Topic	Testimony	Response to Testimony
		Save Our Rural Town, or SORT, submitted a letter on Monday. I wanted to make sure it was received because it wasn't mentioned earlier by Mr. Sackett.	referenced has also been received and responded to. This comment does not address the adequacy of the EIR, and no further response is required.
RPC-139	Traffic	SORT is concerned that the Staff Report finds traffic impacts are less than significant. Then it admits the traffic impact will be significant if Caltrans does not complete the Northwest Corridor Project. Then it says that the issue of traffic impact is out of the County's hands because it has no jurisdiction over Caltrans; so if significant impacts occur then, oh, well.	The Commenter's concern regarding EIR analysis and staff report discussion of traffic-related impacts is noted and will be provided to the Board of Supervisors for consideration. However, EIR analysis and staff report discussion is consistent with and appropriate per CEQA requirements. As explained in Draft EIR, Section 5.10, Traffic, Access, and Circulation, under Thresholds 10-1 and 10-2, in accordance with the MMRP, the Project must provide the required funding for the implementation of all identified roadway and highway improvements necessary to reduce Project-related impacts to a less than significant level, either through an agreement with Caltrans (referred to as the Traffic Mitigation Agreement) or by contributing fair share funding for these improvements. If built, improvements identified in the MMRP would fully mitigate all potential Project-related significant impacts to SR-138 and other state highways. In each case, the MMRP specifically requires that Project funding be provided either in accordance with the agreement with Caltrans and in accordance with timing set forth in that agreement, or prior to final map recordation. Consequently, all of the Draft EIR and MMRP highway facility improvements required to address potential Project-related significant impacts are fully enforceable and must be completed before each phase of development may occur. However, as recognized in the EIR, Caltrans is legally responsible for implementing planned improvements of State facilities, and the Project Applicant and the County do not have the authority to require that Caltrans do so. For this reason, the EIR concludes that if improvements are not implemented, the Project would contribute to significant and unavoidable impacts. (Draft EIR, Section 5.10, pages 5.10-1, -2, -130.) The draft CEQA Findings, included in the most recent staff report, accurately reflect EIR analysis and conclusions that under Thresholds 10-1 and 10-2, impacts would be significant and unavoidable if Caltrans does not implement improvements. See Staff Report Attachment G, Draft CEQA Findings Regarding the Centennial Specific Plan Project and EIR.

Testimony No.	Environmental Topic	Testimony	Response to Testimony
RPC-140	CEQA	But CEQA does not work that way. As lead agency, the County cannot wash its hands of significant impact by throwing the responsibility to mitigate such impact onto another agency. CEQA requires that the County impose conditions on the Project to eliminate significant impact if the conditions are feasible and if they achieve the Project objective.	The Commenter misstates CEQA and the County's responsibility. As explained further in Response to Testimony RPC-139, the County has evaluated potential Project-related impacts and required the implementation of enforceable mitigation that would fund identified necessary roadway and highway improvements. If implemented, these improvements would mitigate impacts to a less than significant level. However, the County does not have legal authority to carry out improvements to State facilities. This, rather, is the responsibility of Caltrans. Therefore, as is specifically permitted under CEQA, the County in its draft CEQA findings concludes that if improvements are not implemented, the Project would contribute to significant and unavoidable impacts because implementation of the improvements is within the responsibility of another public agency and not the agency making the finding. (CEQA Guidelines § 15091(a)(2); CEQA § 21081(a)(2).)
RPC-141	Project Description	In this case, the Project is slated for phase development in ten parts, with each development phase being fully contained and capable of supporting all new occupants.	The Commenter is correct that the Project's conceptual phasing plan proposes development in 10 phases, with appropriate infrastructure and services to serve occupants of each phase. See Draft EIR, Section 4.0, Project Description, for further details.
RPC-142	Traffic	The traffic studies in the EIR show that no traffic impact will occur on existing 138 facilities up to 10 percent of Centennial's development. And with the new corridor, the 138 improvement that Caltrans is proposing, it can accommodate up to 75 percent of the Centennial Development.	The Commenter correctly summarizes Project EIR discussion of impacts prior to and with implementation of the Northwest 138 Improvement Project. MM 10-21 requires funding of improvements to accommodate up to 10 percent of Project buildout and anticipated cumulative development, MM 10-22 requires funding improvements to accommodate up to 75 percent of Project buildout and anticipated cumulative development, and MM 10-23 requires funding improvements to accommodate up to 100 percent of Project buildout and anticipated cumulative development. This testimony does not address the adequacy of the EIR, and no further response is required.
RPC-143	Traffic	These facts set the table for conditioning the project to permit 10 percent development until the Northwest Corridor project is done, then limit it to 75 percent under further improvements after Caltrans has completed its improvements, then allow additional development up to a 100 percent after the Centennial Project has expanded its improvements that are required to accommodate full buildout.	The conditions suggested by the Commenter are not necessary, because mitigation requirements in the EIR, the Project's Mitigation Monitoring and Reporting Program ("MMRP"), and Specific Plan implementation requirements all ensure equivalent safeguards against the possibility of Project development occurring without mitigation of potential impacts through implementation of appropriate improvements. Because the EIR/EIS for SR-138 has been approved, and these improvements are included in the Regional Transportation Plan/Sustainable Communities Strategy, it is reasonably foreseeable that these improvements will be timely constructed to serve the region's transportation needs, which exist independent of the project as discussed in response to Comment ADD-F.10-5. SR-138 improvements that are specific to the Centennial projects, such as the access

Testimony No.	Environmental Topic	Testimony	Response to Testimony
			points to the Project site, are required to be constructed by the Developer/Applicant. The Project is also required to monitor and report on traffic conditions. Mitigation Measure 10-2 specifically requires that the Applicant "submit a traffic study that addresses site access and local circulation in accordance with the County of Los Angeles Department of Public Works Traffic Impact Analysis Report Guidelines. The Project Applicant/Developer shall retain a Traffic Engineer or Civil Engineer licensed in the State of California to perform the traffic study to the satisfaction of the County." (Final EIR, Appendix 2.0-C.Rev, page C-87) This requirement applies, per the MMRP, "Prior to approval of Tentative Maps." (*Id.*) This monitoring and review process also allows for updated traffic counts, which are expected to continue to evolve based on a wide variety of evolving transportation technologies and services (e.g., app-based ride sharing) and workplace patterns (e.g., home-work and WeWork remote work options that reduce peak hour as well as overall commuter trips). In the unlikely scenario that the SR-138 improvements are delayed and unavailable to serve new project demand, approval of the next discretionary approval for the project (e.g., the tentative tract map) could be delayed until such time as adequate traffic capacity on SR-138 exists. Or, the County may condition the map approval on the construction of the needed improvements or deny the tentative tract map. Further, MM 10-21 requires funding of improvements to accommodate up to 10 percent of Project buildout and anticipated cumulative development, MM 10-22 requires funding improvements to accommodate up to 75 percent of Project buildout and anticipated cumulative development, and MM 10-23 requires funding improvements to accommodate up to 100 percent of Project buildout and anticipated cumulative development. While the County cannot require Caltrans to implement improvements (as explained in Responses to Testimony RPC-139 and RPC-140), the Specific Plan and subdivision mapping processes further ensure that Project development would not occur without all necessary infrastructure and improvements. Tentative Tract Map applications are discretionary actions subject to CEQA compliance requirements per Specific Plan Sections 4.5.3 and Specific Plan Appendix 3-B, and per CEQA § 21080(a) - this means development of each portion of the Project contemplated in each subdivision map will require further environmental review and approval from the County to ensure appropriate roadway and freeway infrastructure improvements are implemented prior to development and to ensure impacts are less than significant.

Testimony No.	Environmental Topic	Testimony	Response to Testimony
RPC-144	Traffic	These conditions achieve all the Project's objectives, they eliminate all the significant traffic impacts, and they comply with CEQA. So the County has no method for avoiding imposing these conditions.	The Commenter's suggested conditions are not necessary, because the Project's Mitigation Monitoring Reporting Program and Specific Plan implementation requirements ensure equivalent safeguards against the possibility of Project development occurring without mitigation of potential impacts through implementation of appropriate improvements. Public Resources Code § 21100(b)(3) requires the EIR set forth feasible mitigation measures to minimize significant environmental effects of the Project. The EIR has done this and CEQA does not require the incorporation of conditions suggested by Commenter. See Response to Testimony RPC-143 for more details.
RPC-145	Traffic	So SORT respectfully asks that you add these three conditions -- that you limit development to 10 percent until the 138 Corridor improvements are completed, then you limit it to 75 percent until Centennial has completed its additional improvements of the 138. And then, at that point, they can go on to 100 percent development.	This testimony summarizes the requests made in the Commenter's previous testimony. For responses to these requests, please see Responses to Testimony RPC-142 through RPC-144.
RPC-146	Traffic	There's one other thing that SORT would request -- that you adopt the finding that states the Antelope Valley Area Plan only recognize 138 exits on 60th Street West, 110th Street West, 190th Street West, and 245th Street West. Those are the only exits that the AVAP identified as outside boundary of the Project. Limiting development to just those -- limiting access to just those points is essential for the preservation of rural communities including Green Valley, Three Points, and all lakes and mountain communities. Thank you very much.	The County is aware that the Caltrans' preferred alternative for the Northwest 138 Corridor Project includes recommendations for roadway access to SR-138 that differs from the AVAP. The Centennial EIR includes analysis consistent with the AVAP assumptions as well as the access points specified in the Caltrans preferred alternative. State Route 138 is under the jurisdiction of Caltrans, not the County, and the County does not have the legal authority to determine or limit access points along SR-138 in the vicinity of the Project site, as this comment recommends. For further discussion, please see responses to Comments ADD-F.11-7 and ADD-F.11-8.
Richard DeSpain			
RPC-147	Support	Good morning. My name is Richard DeSpain. I'm here to speak in favor of the Centennial Project. Southern California is and will continue to grow. L.A. County needs a controlled solution to its housing affordability. I believe the Centennial Project is the answer.	Thank you for your participation in this public process. The Commenter's support for the Project has been heard in testimony by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR and, therefore, no further response is required.

Testimony No.	Environmental Topic	Testimony	Response to Testimony
		This unique self-sustaining project will bring endless benefits to this new community. The Proposal will bring over 19,000 new homes at buildout. All of these homes will be state of the art in construction techniques and in compliance with California and Los Angeles County's Green Building and Residential Codes. This is a -- this is positive in contrast to the surrounding areas' building progression of the past. This will be a community that embraces smart growth principles that are highly needed in housing areas around L.A. County. I believe it is designed to be a sustainable, self-contained planned community.	
RPC-148	Traffic	My recommendations would be that the County responds to the roads and traffic, the higher increases. On State Route 138 it's already in great need of upgrade. And new networks of fast lane road to all outlying areas must be considered in the High Desert from the I-5 to State Route 14 and I-15. This should be the County and State's responsibility.	The Commenter's recommendations for County consideration of separate improvement projects to address regional traffic is noted, was heard in public testimony by the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. This testimony does not specifically address the Project or the adequacy of the EIR, and no further response is required.
RPC-149	Airports Housing	Two, there should be a local regional airport in the future for commuter planes and fire and Sheriff's helicopters to operate from, and, three, this plan should include any veteran-honored housing.	With regard to the County's construction of a regional airport, this opinion was heard by the Regional Planning Commission in testimony and will be passed on to the Board of Supervisors for consideration. The Commenter's suggestion that the Project specifically include veteran-dedicated housing is noted, was heard in testimony by the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. This testimony does not specifically address the adequacy of the EIR, and no further response is required.
RPC-150	Support	The Centennial Project is a well thought out community for the region, offering parks, recreation, schools, medical, fire, police, infrastructure, along with open spaces. Commissioners, I urge you to approve this project	The Commenter's support for the Project has been heard in testimony by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR and, therefore, no further response is required.

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		and allow this community to begin in Southern California. Thank you.	
Jim Boes			
RPC-151	Support	Good morning, Chairman Louie and members of the Regional Planning Commission. My name is Jim Boes. I'm here to speak in favor of the Centennial Project. As a resident of the Antelope Valley for over 50 years and a lifelong County resident, I care deeply about the future of our community and our region. In the past ten years, I've served as Chairman for the Planning Commission for the City of Lancaster. I also had the honor to serve as Co-Chairman of the Blue Ribbon Committee that worked with the County of Los Angeles to formulate the Antelope Valley Area Plan. We identified areas of future economic growth and areas of important environmental protection. The community plans for Centennial respect and honor the work we did with the County to create a framework of growth and preservation of our region. It's not often when you have the opportunity to see the hard work and thoughtful process come to fruition. But we can see that here today with Centennial. Centennial has worked hard to listen to the community input and the concerns of the environmental community. Ten years ago, Centennial came to an agreement with some of the largest environmental organizations in the state to preserve 240,000 acres of open space. To say Centennial is a well thought out plan is quite an understatement. What other landowner has dedicated 90 percent of their property for permanent open space, preserving one of California's most biologically diverse areas. It's	Thank you for your participation in this public process. The Commenter's support for the Project has been heard in testimony by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR and, therefore, no further response is required.

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		an impressive undertaking, to say the least. And they balance that with one of the most environmentally sensitive new communities. I would urge the Regional Planning Commission to approve Centennial today. It's time to start implementing these plans. I appreciate your time and your consideration. Thank you.	
Louisa Stevens			
RPC-152	Introduction	Louisa Stevens, Secretary for the Lakes Town Council. The Lakes Town Council opposes the Centennial Specific Plan, which would create a new city at Tejon Ranch.	Thank you for your participation in this public process. The Commenter's opposition to the Project has been heard in testimony by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR and, therefore, no further response is required.
RPC-153	Land Use	The creation of the Tejon Ranch Conservancy actually does little to mitigate a planned city with nearly 20,000 new residences and additional industrial complexes.	The Commenter's opinion that the Tejon Ranch Conservancy does little to mitigate for Project impacts was heard in testimony by the Regional Planning Commission and will be passed on to the Board of Supervisors. The County notes that the Project EIR does not rely on creation of the Tejon Ranch Conservancy to mitigate potentially significant Project-related impacts, but rather imposes mandatory, Project-specific mitigation measure requirements to mitigate impacts to the extent feasible, as set forth in the EIR and the Mitigation Monitoring and Reporting Program, Final EIR Appendix 2.0-C.Rev.
RPC-154	Biology Hazards	In addition to obvious concerns about this biologically rich and diverse area being compromised or destroyed altogether, we have grave reservations about the impact of high density housing and commercial industrial developments with regard to fire. We have lived through mandatory fire evacuations during the Powerhouse Fire of 2012, and a number of people lost their homes. A planned city will only invite more fire events.	With regard to Project-related impacts on biological resources, the EIR has thoroughly and appropriately analyzed such impacts consistent with CEQA requirements and mitigated them to the extent feasible. For more information, please see Draft EIR, Section 5.7, Biological Resources, and Final EIR, Appendix 2.0-C.Rev, the Mitigation Monitoring and Reporting Program. With regard to fire, the EIR appropriately evaluates the Project's potential fire safety impacts under two thresholds of significance. First, the Draft EIR considers whether the Project would expose people or structures to a significant risk of loss, injury or death involving fires because it is located (i) within a Very High Fire Hazard Severity Zone (VHFHSZ), (ii) within a high fire hazard area with inadequate access, (iii) within an area with inadequate water and pressure to meet fire flow standards, or (iv) within proximity to land uses that have the potential for dangerous fire hazard. Second, the Draft EIR considers whether the Project constitutes a potentially dangerous fire

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			hazard. The Draft EIR determined that, with implementation of MM 3-9, Project impacts related to fire hazards would be less than significant under both applicable thresholds of significance. The Draft EIR concluded that Project impacts related to fire safety would be less than significant only after taking into consideration (i) Project site access, (ii) Project site water flows, (iii) Project site topography, (iv) Project site vegetative cover, (v) existing and proposed regulatory controls, (vi) existing mutual aid agreements between federal, state, and local fire safety service providers, and (vii) Project improvements and mitigation measures related to landscaping and vegetation management, building construction, circulation, public utilities, and fire protection services, including but not limited to MM 3-9. This testimony does not specifically address the adequacy of the EIR, and no further response is required. For further discussion of fire impacts, see Draft EIR, Section 5.3, and Final EIR, response to Comment A.2-6.
RPC-155	Traffic	Traffic is another major concern. The communities of Three Points, Green Valley, Leona Valley, Lake Hughes, and Elizabeth Lake will suffer as a result of commuters and others using Pine Canyon Road, Elizabeth Lake Road, Lake Hughes Road, and other roads. The Highway 138 improvement project does not guarantee that traffic will not diverted through those areas to various communities due to various circumstances. As it stands, over the past ten years, a number of nonresident commuters using San Francisquito Canyon Road has increased dramatically, and there have been numerous fatalities. The same could happen along Elizabeth Lake Road.	The Centennial EIR traffic study is based on a travel demand forecasting model that assigns traffic volumes based on travel times. Analysis of SR-138 indicated that level of service (LOS) would generally be LOS B and C during peak travel times with full development of Centennial together with the SR-138 improvements identified as mitigation (Final EIR Appendix 5.10-C, Table 3-8). With LOS B and C conditions, travel times on SR-138 would experience minimal added delay with average speeds of 59 to 60 mph (Draft EIR Table 5.10-15). Based on these travel speeds, a trip from Centennial to Palmdale during the peak hour by way of a route that utilizes SR-138 and SR-14 is approximately 44 miles in length with a travel time of approximately 40 minutes on what will be a fully improved expressway and a freeway. In comparison, a route that utilizes Pine Canyon Road and Elizabeth Lake Road is approximately 39 miles in length with a travel time of approximately 52 minutes, which is 30 percent longer than the SR-138 and SR-14 route. Pine Canyon Road and Elizabeth Lake Road are each rural two-lane roadways subject to additional delay due to slower moving vehicles and the lack of passing areas. Since the SR-138/SR-14 route represents a substantial savings in travel time, and since the route utilizes what will be a fully improved expressway and a freeway with ample opportunities to pass other vehicles, the number of vehicle trips from Centennial to use Pine Canyon Road and Elizabeth Lake Road is expected to be minimal. Analysis that was done by the County when developing the AVAP determined that traffic on Elizabeth Lake Road with full development of the Centennial Project would remain at LOS A conditions with volume to capacity (V/C) ratios on the roadway segments ranging from 0.31 to 0.58.

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			Similarly, from Centennial to Castaic, a route that utilizes SR-138 and I-5 is approximately 32 miles in length with a travel time of approximately 30 minutes on what will be a fully improved expressway and a freeway. Analysis of I-5 indicated that LOS would generally be LOS C and D during peak travel times with full development of Centennial (Final EIR Appendix 5.10-C, Table 4-2). With LOS C and D conditions, travel times on I-5 would experience minimal added delay with average speeds of 58 to 68 mph (Draft EIR Table 5.10-9). In comparison, a route that utilizes Pine Canyon Road and Lake Hughes Road is approximately 41 miles in length with a travel time of approximately 58 minutes, which is almost double the travel time compared to the SR-138 and I-5 route. Pine Canyon Road and Lake Hughes Road are each rural two-lane roadways subject to additional delay due to slower moving vehicles and the lack of passing areas. Since the SR-138/I-5 route represents a substantial savings in travel time, and since the route utilizes what will be a fully improved expressway and a freeway with ample opportunities to pass other vehicles, the number of vehicle trips from Centennial to use Pine Canyon Road and Lake Hughes Road is expected to be minimal.
RPC-156	Water Supply	What about water in the future? Surely considerations regarding drought, climate change are cause for concern.	Project water supply analysis appropriately takes potential drought and climate change impacts into account. For further discussion of Project water supply analysis, including with regard to drought and climate change, see Draft EIR, Section 5.18 Water Supplies, and Final EIR, responses to Comments E.1-5, F.3-4 through F.3-9, F.3A-6, F.3A-9, F.8-213, F.8-214, and F.8-220.
RPC-157	Hazards	With so much construction we come to the very real possibility of Valley Fever.	The EIR appropriately analyzes and discloses potential Project impacts related to Valley Fever, including with regard to the condition, potential for Valley Fever spores to be found in soils in the Antelope Valley, the effects of contracting Valley Fever, and risks from possible exposure to both construction workers and Project residents. See Draft EIR, Section 5.3, Hazards and Fire Safety, pages 5.3-13 and -14 and 5.3-17 through -19, Section 5.11, Air Resources, pages 5.11-28 and -29, and -64 through -67; Final EIR, responses to Comment F.3-29 through F.3-32, F.3A-5, F.3A-38 through F.3A-45, F.3A-68, F.3A-69, and G.13-1. Implementation of fugitive dust control measures required by AVAQMD and SCAQMD and MMs 3-2 and 3-3 would mitigate impacts related to Valley Fever to be less than significant. See also see response to Comment ADD-F.13-10, which further revises valley fever mitigation.

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RPC-158	Miscellaneous	Air, light, noise pollution will all be new and most unwelcome. Why plan an entire new city instead of using smart growth principles that expand and improve upon existing infrastructures? Why plan an area with industrial complex and housing developments where wildlife and the people who enjoy a quiet, healthy, safe, rural lifestyle will be marginalized at best?	The Commenter's opposition to the Project and its siting was heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. The County disagrees with the Commenter's characterization of the Project, and notes that the Project has been situated and designed to promote regional "smart growth" planning principles established by the Southern California Association of Governments' (SCAG) 2016-2040 Regional Transportation Plan/ Sustainable Communities Strategy and the County's Antelope Valley Area Plan for the purpose of sustainably accommodating regional growth projections in a manner that reduces criteria pollutant and greenhouse gas (GHG) emissions and to promote public health. For a more detailed discussion, please see Final EIR, response to Comment F.8-20.
RPC-159	Miscellaneous	Globally and regionally land is disappearing every day. It's not a good plan and terrible stewardship.	This testimony has been heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. The Commenter's opposition to the Project is noted. This testimony does not address the adequacy of the EIR, and no further response is required.
RPC-160	Miscellaneous	It is easy to imagine this area of scenic vistas with beautiful tawny rolling hills the color of mountain lions become congested with traffic, crime, and all manner of pollution that are characteristic of such developments. There will be broken bottles and industrial plastic and cardboard packaging. The ubiquitous greasy fast food wrappers will be blown about by the area's gusty winds and garishly festooning what remains of our native plants.	The Commenter's opinion is noted for the record, has been heard by the Regional Planning Commission, and will be provided to the Board of Supervisors. The County disagrees with the Commenter's characterization of the Project. The EIR appropriately analyzes potential Project-related impacts with regard to traffic, police services, and solid waste disposal, and includes binding mitigation to reduce impacts to the greatest extent feasible. For further information regard traffic analysis, see Draft EIR, Section 5.10, Traffic, Access, and Circulation. For further information with regard to police services, see Draft EIR, Section 5.16, Fire and Law Enforcement. For further discussion of solid waste disposal, please see Draft EIR, Section 5.17, Other Public Services.
RPC-161	Miscellaneous	Lastly, we have profound ethical concerns raised in the July 6th, 2018, Mountain Enterprise article titled, Black List, Tejon Ranch Wages War on Science and Public Comment. Thank you.	This testimony and the Mountain Enterprise article are noted, have been provided to the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. This comment does not specifically address the Project or the adequacy of the EIR, and no further response is required under CEQA. However, for informational purposes the County notes that many scientists have been and continue to be allowed access to the ranch per the RWA and RWMP, and thorough, independent scientific review of Tejon Ranch, including the Project site, has been completed. The Project Applicant also addressed this article in its July 11, 2018 testimony to the Regional Planning Commission, explaining that the RWA does not provide unrestricted public access to Tejon Ranch, but rather provides the express right to withhold access permission. The Applicant further explained that its

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			intention has been to deny access to Center for Biological Diversity and their partner organization, the California Native Plant Society, who have active, ongoing litigation against Kern County, Los Angeles County, and Tejon Ranch regarding Tejon Ranch projects.
Cindy Borcher			
RPC-162	Introduction	My name is Cindy Borcher. I represent the Three Points-Liebre Mountain Town Council and the Association of Rural Town Councils today.	Thank you for your participation in this public process. This comment does not address the adequacy of the EIR, and no further response is required.
RPC-163	Traffic	Traffic and winds were already brought up by our previous speaker. But I would like to stress that our community of Three Points has two access points that lead to five other access points that join -- that take route -- that connect Lancaster, Palmdale, and Santa Clarita.	The Project EIR adequately and appropriately analyzes and mitigates for impacts with regard to traffic and wind-related impacts to the greatest extent feasible. Commenter's description of access to the Three Points community is noted, has been heard by the Regional Planning Commission, and will be provided to the Board of Supervisors. This testimony does not specifically address the Project or adequacy of the EIR, and no further response is required.
RPC-164	Traffic	It's reasonable for us to expect that traffic avoiding congestion that's predicted on Highway 138 will be diverted to our community, to the lakes and valley communities and through the canyon roads that are already highly impacted by commuter traffic from Lancaster and Palmdale areas avoiding the highway -- Highway 14 that people seek to avoid because of congestion, dangerous conditions, traffic closures, and truck traffic.	As noted in Response to Testimony RPC-155, the travel times to and from Centennial using two-lane rural roadways such as Pine Canyon Road, Elizabeth Lake Road, and Lake Hughes Road are substantially longer than when traveling using SR-138, which will be a fully improved expressway, and the I-5 and SR-14 freeways. Because of this, the number of vehicle trips from Centennial using the rural roadways is expected to be minimal.
RPC-165	Traffic	One of our concerns is that the Antelope Valley Area Plan and the Northwest Highway Improvement Project did not review the additional lane freeway that stopped virtually at our community for the -- the DEIR did not evaluate the additional lane in their project or the Antelope Valley Area Plan that would accommodate 100 percent buildout of this community of Centennial. So I have concerns about that. It wasn't -- the issue	The comment refers to a third lane in each direction that would be constructed from 300th Street West to just east of 250th Street West in order to accommodate 100 percent of the Centennial development, which is in addition to the two-lanes lanes in each direction included in Caltrans' preferred Northwest 138 Corridor Project. In the EIR prepared for the Northwest 138 Corridor Project, Caltrans evaluated a roadway cross-section that accommodates a third lane in each direction based on Caltrans standards.[3315] The Northwest 138 Corridor Project's EIR explains that the project study area along SR-138 extends out 300 feet on each side of the

[3315] Caltrans. 2017. Northwest State Route 138 Corridor Improvement Project Final Environmental Impact Report/Environmental Impact State and Section 4(f) Evaluation, pp. 11-22, 29, 166, 320-327

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		was never raised about 100 percent accommodation of traffic as a result of the project.	roadway.[3316] As such, the impacts of a third lane from 300th Street West to just east of 250th Street West in each direction are included within the project footprint analyzed by the Northwest 138 Corridor Project's EIR.[3317] The traffic forecasts utilized in the Caltrans' Northwest 138 Corridor Project EIR included traffic based on 100 percent of Centennial development together with estimates of regional traffic growth. The Centennial EIR includes higher estimates of regional traffic growth in comparison to the Caltrans EIR; therefore, the Centennial EIR is based on a higher volume of traffic forecast for SR-138 resulting in the recommendation for a third lane as noted.
RPC-166	Hazards	The words fire and urban wildland interface are horrifying to rural residents, especially those who have experienced wild fire destruction. Some of the worst fires in California during the last two years occurred at urban wildland interface. Thousands and thousands of homes have been destroyed. Live stock lost horses, pets, animals from all the fires that have happened in our area recently and the Southern California area. The Antelope Valley Area Plan does address fire hazards severity zones by implementing low density land use development in special management areas that are excluded from the economic opportunity areas of the Centennial Project, the project areas and the frequent high winds events area making fighting fires especially difficult and contribute to the spread of fire to the adjacent area.	The Commenter's opinion with regard to fire and choice of development density is noted. With regard to fire, the EIR appropriately evaluates the Project's potential fire safety impacts under two thresholds of significance. First, the Draft EIR considers whether the Project would expose people or structures to a significant risk of loss, injury or death involving fires because it is located (i) within a Very High Fire Hazard Severity Zone (VHFHSZ), (ii) within a high fire hazard area with inadequate access, (iii) within an area with inadequate water and pressure to meet fire flow standards, or (iv) within proximity to land uses that have the potential for dangerous fire hazard. Second, the Draft EIR considers whether the Project constitutes a potentially dangerous fire hazard. The Draft EIR determined that, with implementation of MM 3-9, Project impacts related to fire hazards would be less than significant under both applicable thresholds of significance. The Draft EIR concluded that Project impacts related to fire safety would be less than significant only after taking into consideration (i) Project site access, (ii) Project site water flows, (iii) Project site topography, (iv) Project site vegetative cover, (v) existing and proposed regulatory controls, (vi) existing mutual aid agreements between federal, state, and local fire safety service providers, and (vii) Project improvements and mitigation measures related to landscaping and vegetation management, building construction, circulation, public utilities, and fire protection services, including but not limited to MM 3-9. This testimony does not specifically address the adequacy of the EIR, and no further response is required. For further discussion of fire impacts, see Draft EIR, Section 5.3, and Final EIR, response to Comment A.2-6.

[3316] *Id.* at p. 29.
[3317] *Id.* at pp. 16, 29.

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RPC-167	Land Use	Low density housing would be reduce impacts to the currently rural and remote area. Planners have over-looked hazards and costs associated with high density residential, commercial, and industrial development in the EOA, whose costs due to catastrophic events would be transferred to all of the citizens who pay taxes in Los Angeles County.	The Commenter's opinion regard choice of development density is noted, was heard by the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. With regard to EIR fire impact analysis, please see Response to Testimony RPC-166. With regard to the Project's fiscal impacts, the Commenter's opinion is noted, but the County notes that as discussed in the Draft EIR, such as in Section 5.16 Fire and Law Enforcement and Section 5.17 Other Public Services, the Project is responsible for providing infrastructure and services and would not create negative fiscal impacts on surrounding communities. The Project will provide significant net economic benefits to Los Angeles County, including expected annual revenues of $43,394,902.00, versus $21,827,596.00 of annual costs to the County's General Fund for re-occurring public services, representing an annual net benefit to the General Fund of about $21,567,306.00. The Project will also generate an estimated $22,328,502.00 of property tax revenues.
RPC-168	Biology	The DEIR explains that natural landscape feature of the region, such as Tehachapi Mountains, form a natural linkage of the corridor on a regional scale; yet they have not provided for adequate wildlife crossing north and south across the 138.	The Commenter's opinion with regard to adequacy of the Project's opportunities for wildlife movement is noted, has been heard by the Regional Planning Commission, and will be provided to the Board of Supervisors. However, the County disagrees and notes that per the EIR, wildlife moving from north of the Project across the SR-138 are expected to use either the crossing at the west side of the Project where the Aqueduct intersects the SR-138, or to travel around the Project and cross to the east of the Project. Draft EIR, Section 5.7, Biological Resources, page 5.7-165. In addition, the aqueduct represents a substantial barrier for most species rendering the site less than suitable for substantial movement. (*Ibid.*) In addition, many green ways will be retained and created on the site, natural and unnatural, which will allow for common urbanized wildlife to move about the Project lands. Further, studies on wildlife movement in the Project region have generally shown the Project area as a whole to be largely outside important corridor linking the Sierra Nevada-Cascade Cordillera with the Sierra Madre-Transverse-Peninsular Range Cordillera, and SEA 17, which is considered an important corridor for wildlife, will not be impacted by the Project. (*Id.,* pages 5.7-8, -155, -194.)
RPC-169	Biology	I hope you all can see the letter I presented with mountain lion roadkill in the transition area of the 138 and the I-5.	Materials submitted to the Regional Planning Commission will all be considered and provided to the Board of Supervisors for consideration. This testimony does not specifically address the Project or adequacy of the EIR, and no further response is required. For discussion regarding mountain lion and other large mammals, please see Draft EIR, Section 5.7, Biological Resources, pages 5.7-50 to -54, -63 to -65, -161, and -166, and Final EIR, responses to Comments B.4-53 and F.5-8.

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RPC-170	Ranch-Wide Agreement	I also have concerns that the Ranch-Wide Agreement that oversees the Tejon Ranch Conservancy manages that area as a hunting reserve. It can remove animals that threaten the -- the animals that provide a great deal of income for the home ranch that they sell trophy hunting to private hunters. I'm concerned that the wildlife driven from the area due to the Project over time will be funneled into the conservancy area where they might end up losing their lives to hunting or wildlife management to provide more hunting opportunities for paying customers.	The Commenter's concern was heard in testimony by the Regional Planning Commission and will be provided to the Board of Supervisors. With regard to the Project's On-Site Mitigation Preserve, all recreational hunting is prohibited per MM 7-23. In the Off-Site Mitigation Preserve, hunting is restricted to Ranch authorized individuals within designated hunting areas only per MM 7-23. Hunting on the ranch as a whole is subject to restriction in the TUMSHCP, and hunting uses are considered compatible in the Off-Site Mitigation Preserve because no new disturbances or increases in hunting permit issuance is anticipated. Further, the Applicant coordinates regarding hunting activities with the California Department of Fish and Wildlife, is not entitled to remove or kill animals disrupting the hunting program and has no policy to do so.
RPC-171	Miscellaneous	Yes. I believe that the Tejon Ranch Conservancy should make public requirements -- make public the requirements for access and, if necessary, amend them to provide fair and equal treatment for the process. If they receive public funds, which they have in California, no member of the public should be excluded no matter what organization they belong to.	The Commenter appears to be referring to Tejon Ranch denying access to the ranch to certain individuals, as reported in the Mountain Enterprise. The Commenter's opinion is noted. This testimony and the Mountain Enterprise article are noted, have been provided to the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. This comment does not specifically address the Project or the adequacy of the EIR, and no further response is required under CEQA. However, for informational purposes the County notes that many scientists have been and continue to be allowed access to the ranch per the RWA and RWMP, and thorough, independent scientific review of Tejon Ranch, including the Project site, has been completed. The Project Applicant also addressed this article in its July 11, 2018 testimony to the Regional Planning Commission, explaining that the RWA does not provide unrestricted public access to Tejon Ranch, but rather provides the express right to withhold access permission. The Applicant further explained that its intention has been to deny access to Center for Biological Diversity and their partner organization, the California Native Plant Society, who have active, ongoing litigation against Kern County, Los Angeles County, and Tejon Ranch regarding Tejon Ranch projects.
George Dickerson			
RPC-172	Support	Morning. My name is George Dickerson. I've been a resident of the Antelope Valley for 27 years, a former Marine, served 7 years, and now I own my own business in the Antelope Valley for 25 years. I want to express my full support of this Centennial Project. As I read on, you'll see I represent a broad	Thank you for your participation in this public process. The Commenter's support for the Project has been heard in testimony by the Regional Planning Commission and will be passed on to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR and, therefore, no further response is required.

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		cross-section of both residents and business of the A.V. As a small business owner, I'm involved in the local chambers. I'm a former board member of the "Cortsal" Chamber of two years. There are many chamber members who are very excited for this new town and services in West Antelope Valley. I support a couple nonprofit veteran organizations in the A.V. as well, with members in support of this project with better affordable housing for personnel getting out of the military and desiring to stay here to work as contractors at Plant 42 and such. My business allows me substantial face time with my customers. When I talk to other business owners in the A.V., one of our biggest challenges and concerns are the lack of affordable housing for employees, especially for the lower middle class. We need housing. And the Centennial Project would provide that for the West Antelope Valley. Not only will Centennial's housing be more affordable, but the Project has implemented all the future needs of the new community, including public services, parks, civic center, medical, and other amenities. This will not be a stress on the economy, but boost for the A.V. I've heard opposition say this is urban sprawl. But this project is the exact opposite. The Antelope Valley Area Plan that was adopted by the Board of Supervisors dedicated three locations for future growth to help preserve the rest of the A.V. from sprawl. Centennial is within one of those areas and is just implementing a decision that L.A. County has already approved. I hope that you approve Centennial and hear the importance of this project to the local residents of Antelope Valley.	

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		I have four grown children. In the last two years, three of them and their spouses moved out of state for reasonable housing. My fourth, which is working to be my business partner, would benefit from affordable housing that would be offered with this project, and maybe she would not leave the state as well. Lastly, I want to say that, when I have heard the studies and read the reports in consideration that Centennial has made for environmental issues, I'm very impressed and thankful that they care. We need this housing, and we need these services. Thank you.	
Virginia Stone			
RPC-173	Introduction	My name is Virginia Stone. And I represent the Antelope Acres Town Council. And we would like to request that this FEIR be not approved today, be extended for further comment and for further deliberation because there are so many cumulative effects that are yet undefined and yet -- and not adequately reviewed in the plan documents. This is a big project. It is imperative that L.A. County get it right. It's going to be an unincorporated city that people would expect urban services surrounded by people who want a rural lifestyle. And there's lots of financial questions that need to be way more specific. There are several unavoidable that -- according to the FEIR, that cannot be mitigated. And we feel that those need to be looked at further to see what can be done about that because they will have great effect on the other people.	Thank you for your participation in this public process. The Commenter's opposition to the Project has been heard in testimony by the Regional Planning Commission and will be passed on to the Board of Supervisors for consideration. The EIR thoroughly analyzes the Project's potential direct, indirect and cumulative impacts on the environment, identifies fully enforceable mitigation measures that reduce impacts to the greatest extent feasible, and identifies impacts for which despite the identification of all feasible mitigation, impacts would be significant and unavoidable. Per CEQA, the Board of Supervisors may determine that the Final EIR has considered the identified means of lessening or avoiding the Project's significant effects and that to the extent any significant direct or indirect environmental effects, including cumulative project impacts, remain unavoidable, such impacts are acceptable in light of the social, legal, economic, environmental, technological and other Project benefits, that override them. See Draft CEQA Findings Regarding the Centennial Specific Plan Project and EIR, and Draft Statement of Overriding Considerations, for more details.

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RPC-174	Population/ Housing	No. 1, the -- just for some of them, it talks about population and housing and employment impacts. The cumulative impact, which affects our town of Antelope Acres and all the surrounding areas in there, it says, they will contribute -- the project will contribute reasonably foreseeable additional development proposals, seeking AVAP Amendment -- and this Project has so many amendments -- that could be made outside the West EOA and would -- the people would reasonably expect that those also would be granted to them and would further exacerbate sprawl.	As noted by the Commenter, with regard to the proposed Project's impacts in comparison to existing Project site conditions, the Draft EIR conservatively concludes that the existence of the Project makes it reasonably foreseeable that additional development proposals seeking AVAP amendments could be made outside the West EOA, which is considered a significant, adverse indirect growth-inducing impact. Draft EIR, Section 7.0, Cumulative Impacts, pages 7-19, and Section 6.0, Growth-Inducing Impacts, pages 6-6 to 6-9. However, the EIR does not indicate that the Project would exacerbate sprawl. See Final EIR, response to Comment F.8-20 for an in-depth refutation of the assertion that the Project constitutes or would contribute to sprawl. For further discussion of growth-inducing impacts, see Draft EIR, Section 6.0, Growth-Inducing Impacts, and Final EIR, responses to Comments F.8-47 through F.8-49.
RPC-175	Traffic	Traffic and circulation impact: It says that it will not physically divide any community. Well, Antelope Acres will see absolutely the cumulative traffic will divide the town of Antelope Acres in half, as specifically stated in the Caltrans Northwest 138 EIR. And they have tried looking at many different ways to try to lessen that. So we'd like that corrected.	The Project's potential to physically divide an established community is analyzed in Draft EIR Section 5.8, Land Use (pages 5.18-18 through 5.18-19). As explained in the EIR, the Project site is generally undeveloped and is not part of an established community that would be divided with implementation of the Project. Caltrans' Northwest State Route 138 Corridor Improvement Project (SR-138 Improvement Project) is a separate action being undertaken by a separate lead agency and is not a consequence of the Project, as discussed further in response to Comment ADD-F.10-5. In any case, the SR-138 Improvement Project's potential to physically divide an existing community were fully analyzed in Northwest State Route 138 Corridor Improvement Project Environmental Impact Report/Environmental Impact Statement prepared by Caltrans and was determined to be less than significant with implementation of mitigation.
RPC-176	Noise	The noise impact -- it says that those are -- you can't mitigate that because the sensitive receptors -- that would be people like me -- that live near there, will have noise levels. It doesn't specifically say what or exactly the noise level because they haven't -- I haven't seen in this FEIR an accumulative traffic for the 138 -- amount of traffic that they expect -- traffic trips that would be made every day. The noise would be like the noise on any freeway.	As explained in Draft EIR Section 5.12, Noise, pages 5.12-45 through 5.12-46, the Project would generate an estimated 75,908 external daily trips at buildout; these vehicles would primarily use State Route (SR) 138, Interstate (I) 5, SR-14, and SR-99. The addition of Project traffic to existing traffic would increase the traffic volumes on these roadways and, therefore, the traffic noise at adjacent receptors. Traffic noise increases would exceed the 3 A-weighted decibels (dBA) Community Noise Equivalent Level (CNEL) threshold of significance at identified receptors on SR-138, between Gorman Post Road and Old Ridge Route Road, resulting in a significant impact. The impact would be considered significant and unavoidable because feasible mitigation to reduce these impacts is not within County jurisdiction. Noise-reduction measures would involve alterations to private property and/or within California Department of Transportation (Caltrans) right-of-way, which are not in the County's or the Project Applicant's control. It should be

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			noted that the forecasted noise increase is 3.3 dBA, and a noise increase of 3 dBA, when occurring instantaneously, is barely perceptible to most people. Project-generated traffic noise increases at Project buildout on other parts of SR-138 would not exceed 2.5 dBA CNEL. Project-generated traffic noise increases at Project buildout on I-5, SR-14, and SR-99 would be less than 1.0 dBA CNEL. Traffic noise increases due to the Project would occur gradually over the buildout period of approximately 20 years. "Existing Plus Project" noise levels along freeway segments are described on Draft EIR Table 5.12-11 (page 5.12-38), and Draft EIR Table 5.12-12 (page 5.12-42) shows the "2035 Without Project" and "2035 With Project" traffic volumes along freeway segments, the calculated noise levels at the nearest receptor, and the nose increase due to Project-generated traffic.
RPC-177	Solid Waste	The solid waste impact -- the contributions to the cumulative mass for land fill capacity, which are already a controversy in L.A. and L.A. County. How much -- they just say, well, parts that are not recyclable -- well, it's just very vague. And it says, we're going to take it to so many landfills. And it's just very dismissive and those kinds of things provide problems for the taxpayers and county residents in the future. And I don't believe that that is necessarily solid -- or good planning.	The Commenter's opinion that analysis of Project-related landfill use is vague was heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. However, the County disagrees and notes that the EIR appropriately analyzes Project-related solid waste disposal impacts, based on available County information. The Los Angeles County Department of Public Works (LACDPW) has evaluated and planned the County's solid waste disposal needs over a 15-year time frame and included strategies for maintaining adequate disposal capacity from 2015 to 2030. While the County updates this report annually, at this time, they have only evaluated solid waste disposal to 2030 and determine adequacy of existing landfills. However, as annual updates are completed, it is expected that updated waste projections, facility capacities, diversion rates, and alternative technologies would be developed to meet the future waste disposal needs of the County. As stated on Draft EIR page 5.17-18, the Los Angeles County Countywide Siting Element establishes goals and policies for the siting of solid waste transformation and land disposal facilities to serve the solid waste generation and disposal needs of the County for the next 15 years. The County is in the process of updating the Countywide Siting Element, which will include goals and strategies through which current and future solid waste management infrastructure needs can be met; potential landfill expansion sites; and out-of-County disposal opportunities. Thus, evaluation and planning by the LACDPW is expected to be updated continuously to identify strategies for maintaining adequate disposal capacity into the future. However, permitted Class III landfill capacity cannot be guaranteed at the time of Project buildout and through the life of the Project, which are beyond the LACDPW's 15-year planning horizon for disposal. Therefore, while the County is committed to handling all solid wastes generated within the County now and into the future, to be

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			conservative, the Draft EIR concludes that the Project buildout would result in a significant impact on the County's anticipated Class III landfill capacity. Draft EIR, Section 5.17, Other Public Services, page 5.17-2. PDFs 17-2 and 17-3, and MMs 17-9 and 17-10, reflect all feasible measures to reduce and divert the Project's municipal solid waste generation. Therefore, the Draft EIR concludes that the Project would conservatively result in significant and unavoidable impacts related to municipal solid wastes during long-term operation of the Project. (*Ibid*.) With regard to the selection of landfills to serve the Project, Table 5.17-3 on Draft EIR page 5.17-23 lists the major landfills that serve the Project area. However, solid waste haulers and landfills operate in a free enterprise system in the Antelope Valley area that allows the use of any waste hauler and any landfill. Draft EIR page 5.17-29 states that construction wastes are likely to be disposed at the nearest landfills, the Antelope Valley Public Landfill and the Lancaster Landfill and Recycling Center, but may be disposed at any of the available facilities, as selected by the individual contractors. Draft EIR page 5.17-31 also states that long-term solid wastes from the Project after diversion may ultimately be disposed of at any in-County facility and out-of-County facilities.
RPC-178	Conclusion	These are just some of the concerns that we had in the FEIR. This is a very large project. So, again, we ask that you to require additional time to go over the FEIR to discuss these in much more detail. Thank you.	The Regional Planning Commission heard this testimony and will consider it. It will also be passed on to the Board of Supervisors for consideration. With regard to time, the County has complied with CEQA requirements and provided appropriate time to review the EIR, with public hearings at the Regional Planning Commission on June 6, 2018, July 11, 2018, and August 29, 2018 This comment does not specifically address the adequacy of the EIR, and no further response is required.
Sharon Rooney			
RPC-179	Introduction	Good morning. My name is Sharon Rooney. I've been a resident in the West Antelope Valley living just east of this project for almost 40 years.	Thank you for your participation in this public process. The Regional Planning Commission heard this testimony and will consider it. It will also be passed on to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR, and no further response is required.
RPC-180	Hazards	I moved here in 1979, then unaware that the soil in the Antelope Valley carries a fungal spore that, when breathed, causes Valley Fever. The prevailing winds are eastward, but they do blow in every direction. And anybody who lives here can testify that the winds really blow out here. These spores	The health of effects of air pollutants associated with the Project, including Coccidioides immitis spores that cause Valley Fever, are analyzed in Section 5.11, Air Resources (pages 5.11-5 through 5.11-10, and 5.11-28 through 5.11-29), and in Section 5.3, Hazards and Fire Safety (pages 5.3-13 through 5.3-19). This comment correctly notes that Valley Fever spores can be transported on the wind. Given the prevalence of Valley Fever spores in the Antelope Valley, the EIR conservatively presumes that Valley Fever spores affect the entire Project site and present a health risk to existing and future

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		become airborne when the soil is disturbed, and then they blow in the wind. Over the years, I remember hearing about people -- neighboring farmers and residents, who moved out to the country for rural living, who suffered months with these flu-like symptoms, who recovered eventually, but suffering lasting issues. Life was never the same. Three years ago I became very sick. And I was misdiagnosed for six weeks. Then I was informed I had Valley Fever and earlier treatment would have helped greatly. I suffered for six months with treatment that doesn't kill the fungus, rather only suppresses its growth. If untreated, it can cause spinal meningitis and lead to death. Within a year of the infection -- within a year, the infection disseminated and I became sick for another year and a half, the treatment having side-effects similar to chemotherapy -- chronic fatigue, joint pain, depression. And believe me, it is life-changing. If this project was to start disturbing this beast in the soil, it would endanger all the workers, all the existing population, their pets, their livestock, as well as future residents and businesses. Wildlife is also susceptible. This infection occurs in most animal species -- dogs, cats, horses and other livestock. Animals suffer terribly, and the costs are unbelievably expensive for testing and treatment. So having this life-changing illness that has slowed my life to a fraction of normal, I urge you to consider having more awareness of this. You will be responsible for allowing this possible epidemic to occur. There are no vaccines yet and no medication to completely get rid of the Valley Fever.	residents and workers in the Project area through ground-disturbing activities. In light of this presumption, the EIR imposes feasible mitigation measures to reduce the EIR's assumed Valley Fever risk to less than significant levels, as discussed on EIR page 5.3-19 and in response to Comment ADD-F.13-10. As this comment correctly notes, some animals are susceptible to Valley Fever. According to the Valley Fever Center for Excellence (VFCFE) at The University of Arizona, Tucson, "most mammals can be shown to be infected with the Valley Fever fungus, even if they do not get sick very often." University of Arizona, Tucson. Valley Fever In Other Animals. https://vfce.arizona.edu/valley-fever-dogs/valley-fever-other-animals (accessed July 27, 2018). According to the VFCFE, species in which Valley Fever has been found include: dogs; cats; cattle and other livestock; horses; llamas and alpacas; apes and monkeys; zoo mammals (i.e., kangaroos, wallabies, tigers, bears, badgers, otters); marine mammals (i.e., sea otters, dolphins, California sea lions); mammalian wildlife that lives in the endemic area (e.g., skunk, cougar). (*Ibid*.) In response to this comment, MM 3-11 is hereby proposed for revision as follows: **MM 3-11** The Project Applicant/Developer shall be responsible for the creation of a website on the proposed Centennial community internet that provides public information <u>in both English and Spanish</u> regarding dust-generating activities, to be maintained and updated as appropriate throughout the Centennial Project construction period. The purpose of the website would be to enable interested parties both on- and off-site to easily access information relevant to potential Valley Fever risk, <u>including information relevant to potential Valley Fever risks to pets, horses, and other animals that may be present at or around the Project site during construction activities</u>. The Project Applicant/Developer shall also be responsible for the preparation and one-time distribution to surrounding communities and to all schools located in the communities of Gorman, Lebec, and Frazier Park of a notice describing the availability of this website to provide awareness of the site and its contents.

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		Also, there is a cement plant to the northwest of this proposed community that is constantly disturbing soil and even blasts there, on a regular basis, the soil. And I imagine that will blow right toward the Project site. Thank you for listening. I hope you make a responsible decision with this information. Bye.	Regarding this comment's concerns regarding medical treatments for Valley Fever, the Mayo Clinic advises most people with acute Valley Fever don't require treatment, and the best therapy for otherwise healthy adults is often bed rest and fluids, even when symptoms are severe. Mayo Clinic. Valley Fever: Diagnosis & Treatment.[3318] The Mayo Clinic further advises that, if symptoms don't improve or become worse, a treating doctor may prescribe an antifungal medication (e.g., fluconazole, itraconazole), and more serious infections may be treated with an intravenous antifungal medication (e.g., amphotericin B) or with two newer antifungal medications – i.e., voriconazole and posaconazole. (*Ibid.*) This comment's concerns regarding the National Cement Plan located in Kern County north of the Project site are noted and will be provided to County decision makers for their consideration. In California Building *Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal.4th 269, the California Supreme Court held that CEQA generally does not require an EIR to analyze how existing environmental conditions (e.g., existing air pollutants generated by the offsite National Cement Plant) might impact the Project's future users or residents. However, it should be noted that the National Cement Plant operates under permits issued and enforced by the Eastern Kern Air Pollution Control District (EKAPCD) and must comply with EKAPCD Rule 419. EKAPCD Rule 419 prohibits the cement plant from discharging from any source whatsoever air contaminants or other materials which cause injury, detriment, nuisance or annoyance to the public, or which endanger the health or safety of the public.
Lydia Ponce			
RPC-181	Introduction	Lydia Ponce, Venice, California, So. Cal. 350. Master Plan Entitlements, Specific Plans -- these are colonial settler laws providing continued systemic capitalistic environmental desecration. The Antelope Valley is named Antelope. We have the bald eagle, kit foxes, badgers, mountain lions, bears, bobcats from their territory near and the California Condor knows no borders. And this migratory bird is my direct relative, as I am the Condor Tribe. I am "Myo" from Sinaloa, Mexico.	Thank you for your participation in this public process. The Regional Planning Commission heard this testimony and will consider it. It will also be passed on to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR, and no further response is required.

[3318] Mayo Clinic. 2018 (July 27, accessed). Valley Fever. https://www.mayoclinic.org/diseases-conditions/valley-fever/diagnosis-treatment/drc-20378765.

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RPC-182	Biology	Our winged and four legged, finned and creepy crawlers are all of our relatives. The State of California Coastal Commission denied a permit at Banning Ranch because of our relative, the burrowing owls. They take residence there, and they take residence here at this proposed project area. It is a protected species, as is the bald eagle. This Project is not affordable for them.	The Commenter's testimony was heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. The Project EIR discusses impacts to the burrowing owl on page 5.7-150, while impacts to individuals is considered potentially significant and MM 7-2 is provided to reduce impacts to less than significant, the loss of habitat is determined to be adverse but less than significant. The availability of potentially suitable habitat for this species in the region is extensive and includes the majority of the landscape within it. As such, the loss of habitat resulting from Project implementation is relatively minor and would not be expected to have a discernable effect on regional populations of the species. Furthermore, the Mitigation Preserve described in PDF 7-1 on page 5.7-135 sets aside over 27,000 acres of land composed of lands which are largely suitable for burrowing owl and burrowing owl have been detected within the Mitigation Preserve. For further discussion specific to burrowing owl, please see Draft EIR, pages 5.7-22, -92, -115, -150, and Final EIR, responses to Comments B.4-24, B.4-25, F.8-163, and F.8-164.
RPC-183	Affordable Housing	Affordable housing for whom? Extremely low and low-moderate incomes? How will the County acquire a list to draw names for a lottery for the housing? Is it like for like? Homes for upper income and lower income that will provide the same marble countertops, washers and dryers, parking? If it's not in writing, it does not exist. Please do not approve this Project, as it further diminishes people in poverty in our lives. I recommend that you deny this Project -- or deny this permit.	The Commenter's opposition to the Project has been heard by the Regional Planning Commission and will be passed on to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR and, therefore, no further response is required. With regard to affordable housing details, please see the Affordable Housing Implementation Plan in the Specific Plan, at Final EIR, Appendix 3-C to Appendix 4.0-A.Rev.
RPC-184	Miscellaneous	And if it's the big tax revenue that you're all about, then continue the process with the developers and investors wiggling in their seats with anticipation. Order them to work with the community because jobs are temporary, and employees must drive great distances to these projects as such.	The Commenter's opinion has been heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. The Project does incorporate a local hire program. This testimony does not specifically address the adequacy of the EIR, and no further response is required.

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RPC-185	Miscellaneous	We need to take more time to reduce this project significantly in size, reduce its carbon footprint, as our winged and four-legged relatives require and are more than deserving to be honored, defended, and protected. When will the developers and investors learn they cannot control nature and redirect it no matter how well their plans are written?	The Regional Planning Commission heard this testimony and will consider it. It will also be passed on to the Board of Supervisors for consideration. The Commenter's opinion regarding Project size and character is noted. This comment does not address the adequacy of the EIR, and no further response is required
RPC-186	Conclusion	I don't believe their phasing and their future plans typically made -- they are made of empty promises on paper. Our lives are now. Deny this project because our children are deserving of green spaces over green paper money profits.	The Regional Planning Commission heard this testimony and will consider it. It will also be passed on to the Board of Supervisors for consideration. The Commenter's opinion is noted. This comment does not address the adequacy of the EIR, and no further response is required
Sean Longmire			
RPC-187	Introduction	Good morning members of L.A. County Planning Commission. As a current resident, homeowner, and backyard naturalist – … Sean Longmire. As a current resident, homeowner, and backyard naturalist in the First District and a lifelong Angeleno who grew up in the Third District, I'm here to ask that the Planning Commission not recommend the approval of the Development Centennial Specific Plan as proposed by the Tejon Ranch Corporation.	Thank you for your participation in this public process. The Commenter's opposition to the Project has been heard by the Regional Planning Commission and will be passed on to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR and, therefore, no further response is required.
RPC-188	Miscellaneous	The Tejon Ranch Corporation and their individual stakeholders have every right to propose development on their land investment, just as I have the right to build and invest in my own property in Los Angeles. But this plan in its current form, as evidenced by its need for the various entitlements from the Los Angeles County is ill-conceived as it still remains.	The Commenter's opposition to the Project has been heard by the Regional Planning Commission and will be passed on to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR and, therefore, no further response is required.

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RPC-189	Biology	The project simply has too many negatives going against it -- among them, the destruction of unique habitats and its associated biodiversity. The proposed land, if it would be developed, approximately 70 miles north from where we now sit, would forever alter some of the finest native grassland that remains in California.	The Commenter's opposition to the Project has been heard by the Regional Planning Commission and will be passed on to the Board of Supervisors for consideration. With regard to Project impacts on habitat, the EIR concludes after thorough analysis that habitat loss is not an adverse impact on wildlife resources at a project or cumulative level. Draft EIR, Section 5.7, Biological Resources, page 5.7-145 to -153, Section 7.0, Cumulative Impacts, page 7-16. This is consistent with the independent judgment of scientists and representatives of the six leading environmental groups that signed the Tejon Ranch Land Use and Conservation Plan, as described in the Final EIR, responses to Comments F.3-12 and F.8-108. With regard to grassland, Draft EIR Section 5.7, Biological Resources, discloses the Project's potential impact to grasslands and determines that direct and indirect impacts would be mitigated to a less than significant level, but cumulative impacts to native grasslands would be a cumulative significant impact. (Draft EIR, pages 5.7-158, -162.) Project implementation would include mitigation at a ratio of at least 2:1 for grasslands, resulting in improved functions and values of grasslands on the Project site, in addition to preservation in perpetuity within the Centennial Mitigation Preserve as described in PDF 7-1 on page 5.7-135 of the Draft EIR. Intensive, multi-year grassland studies have revealed that grasslands of equal or greater value occur in vast quantities in the Mitigation Preserve. Please see Final EIR, responses to Comments B.4-17, B.4-43, B.4-63, F.7-22, F.8-124, F.8-125, F.8-127, F.8-128, and F.8-131 for further discussion of grasslands.
RPC-190	Traffic	Traffic: Future residents of this proposed city, when its fully expanded to 55,000 people, will endure long commutes with the nearest employers being 40 to 60 miles away, making regional traffic even worse.	As discussed on Draft EIR page 5.10-51, the North County Sub-Area Model results show that 40 percent of the trips made on site would be 3 miles or less in length, and nearly 70 percent of all internal trips would be 4 miles or less. As shown on Table 3.8 of the traffic study (Draft EIR Appendix 5.10-A), the North County Sub-Area Model results estimate that, on average, each internal Project trip will be 3.4 miles in length. The model estimates that an average external trip will be 45.9 miles in length. Finally, the North County Sub-Area Model estimates that 48 percent of all trips will be internal and 52 percent of all trips till be external to the Project. Consequently, the average Project trip is estimated to be 25.5 miles in length. As discussed on page 3-9 of Draft EIR Appendix 5.10-A, these estimated trip lengths are conservative because they do not reflect the trip reduction measures being implemented by the Project that will encourage trips by walking, biking, and transit.

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RPC-191	Greenhouse Gas	Greenhouse gas emissions: The greenhouse gas emissions that will result from the vehicle pollution energy consumption, pumping of stored ground water, and loss of carbon sequestration mean intact habitats will be unmitigatable. The Antelope Valley already suffers some of the worst levels of PM 2.5 and PM 10 pollution. This project will make already poor air quality worse.	As discussed in Final EIR, response to Comment F.8-79, the Project's potential GHG impacts from these sources were fully disclosed and analyzed in Section 5.21 of the Draft EIR. Moreover, the Draft EIR includes mitigation measures which require compliance with a non-exclusive list of laws and regulations requiring GHG reductions in equipment, activities, facilities and services associated with the project (MM 21-20) The Draft EIR also includes 45 additional mitigation measures to reduce GHG emissions from project operations and/or construction activities (MMs 10-1, 10-25, 10-26, 11-1 through 11-7, 13-6, 14-1, 17-9, 17-10, 18-1, 18-2, 19-1 through 19-5, 20-2.1, 20-2.2, 20-3.1 through 20-3.3, and 21-1 through 21-19). In addition, the Specific Plan includes additional commitments to sustainable design and operational practices which minimize GHG emissions, as detailed in Final EIR, response to Comment F.8-204, and mitigation measures have been revised in response to comments on the Draft EIR to further reduce the Project's GHG emissions. See revised and added mitigation measures as set forth in Final EIR, responses to Comments F.8-95, F.8-204, F.2-2, F.2-5, F.3-29, F.3A-46, and F.8-189. However, climate change is a global phenomenon and the significance of greenhouse gas emissions is inherently cumulative in nature. Moreover, the County of Los Angeles has no jurisdictional control or responsibility for GHG reductions in other parts of California (and certainly not in the context of global action), which all contribute to climate change. Although many other agencies with the necessary jurisdiction are currently taking action to reduce GHG emissions, the County cannot assure that these measures would ultimately be implemented by such agencies or sufficient to address climate change given its jurisdictional limitations. Therefore, the Draft EIR conservatively determined that the Project's incremental contribution to the global GHG emissions inventory would be considered cumulatively considerable and that this cumulative impact would be significant and unavoidable, even though the Project satisfies several "pathways to compliance" identified by the *California Supreme Court in Center for Biological Diversity v. Department of Fish and Wildlife* (2015) 62 Cal.4th 2004. The air quality analyses in Section 5.11, Air Resources, of the Draft EIR was conducted based on the methods recommended by the SCAQMD for criteria pollutants and TACs, as discussed on pages 5.11-18 through 5.11-22. Descriptions of health effects for each of the analyzed air pollutants were provided to inform the public of potential health effects as required by the disclosure requirements under the CEQA. Project related air pollutant emissions were evaluated both in terms of contributions to regional air

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			quality and localized impacts to uses proximate to the Project site. As this comment correctly notes, the Draft EIR disclosed that there would be significant and unavoidable air quality impacts related to construction emissions in the jurisdiction of the AVAQMD as well as the SCAQMD. Long-term operational emissions were also found to exceed the AVAQMD and SCAQMD thresholds of significance for regional emissions. However, it should be noted that the South Coast Air Quality Management District (SCAQMD) has reviewed the Centennial EIR and determined that the Project's Centennial Specific Plan "exemplifies [the County's] leadership in promoting sustainable communities development" and "will help reduce emissions from mobile sources, protect the public health from air pollution, and achieve healthful air in the [South Coast Air] Basin" (see Comment D.4-2).
RPC-192	Hazards	Fire: The proposed site is notoriously windy, as other people have mentioned, making wind-driven fire highly likely. And adding a 55,000 person city will lead to increased fire frequency. In the face of fires in late 2017, have we learned nothing about allowing development in remote places of L.A. and adjacent counties. The cost of fighting fires on Tejon Ranch will become a burden to Los Angeles County and adjacent Kern County.	With regard to fire, the EIR appropriately evaluates the Project's potential fire safety impacts under two thresholds of significance. First, the Draft EIR considers whether the Project would expose people or structures to a significant risk of loss, injury or death involving fires because it is located (i) within a Very High Fire Hazard Severity Zone (VHFHSZ), (ii) within a high fire hazard area with inadequate access, (iii) within an area with inadequate water and pressure to meet fire flow standards, or (iv) within proximity to land uses that have the potential for dangerous fire hazard. Second, the Draft EIR considers whether the Project constitutes a potentially dangerous fire hazard. The Draft EIR determined that, with implementation of MM 3-9, Project impacts related to fire hazards would be less than significant under both applicable thresholds of significance. The Draft EIR concluded that Project impacts related to fire safety would be less than significant only after taking into consideration (i) Project site access, (ii) Project site water flows, (iii) Project site topography, (iv) Project site vegetative cover, (v) existing and proposed regulatory controls, (vi) existing mutual aid agreements between federal, state, and local fire safety service providers, and (vii) Project improvements and mitigation measures related to landscaping and vegetation management, building construction, circulation, public utilities, and fire protection services, including but not limited to MM 3-9. This testimony does not specifically address the adequacy of the EIR, and no further response is required. For further discussion of fire impacts, see Draft EIR, Section 5.3, and Final EIR, response to Comment A.2-6. With regard to the Project's fiscal impacts on other communities, please see Response to Testimony RPC-167.

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RPC-193	Geology	Earthquakes: The site is located on the San Andreas fault and adjacent to the Garlock fault. These are the State's two largest fault systems. L.A. County should focus development efforts towards areas with less seismic risk. Thank you.	The Commenter's preference for an alternative location due to fault placement is noted, has been heard by the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. The EIR thoroughly and appropriately analyzes potential Project-related impacts due to fault location. First, it should be noted that the risk for earthquake shaking throughout Southern California is essentially the same, with a reduced risk along the southeastern portion of the State, so the nearness of one or more active faults does not have a direct correlation to risk of a seismic event and the magnitude of the event in a certain area. With regard to the Project site specifically, due to the proximity of both the San Andreas Fault and Garlock Fault to the Project site, a fault research company called Earth Consultants International (ECI) conducted a detailed fault investigation on the Project site and evaluated potential hazards as a result of fault locations in relation to the Project site and planned development areas. See Draft EIR, Appendix 5.1-A. While earthquakes that may occur along the San Andreas Fault Rift Zone are potential generators of significant ground accelerations at the site, foundation systems must be designed to withstand these accelerations, and secondary impacts such as liquefaction may be mitigated by remedial grazing, structural design and foundations or ground improvement techniques; active fault zones can also be mitigated against by implementing setback zones from Alquist-Priolo Earthquake Fault Zones. Accordingly, as shown on Draft EIR Exhibit 5.1-2, the Project has been designed to avoid development in areas near this zone. Draft EIR, Section 5.1, Geotechnical, page 5.1-16. The Project shall incorporate all applicable geotechnical recommendations identified in the geotechnical documents previously prepared for the Project, and implementation of these requirements would ensure impacts would be less than significant. For further discussion regarding seismic impacts and faults, see Final EIR, responses to Comments F.8-206 to F.8-210.
Rachel Wing			
RPC-194	Introduction	Thank you, Mr. Chairman, Commissioners and Staff. My name is Rachel Wing from Pasadena. I'd like to just highlight everything that Dr. Longmire said with particular respect to how loss of some of the natural features, particularly the native grassland and the rare plants, are unmitigatable. So I am speaking as a private citizen in opposition to the project as a whole.	Thank you for your participation in this public process. The Commenter's opposition to the Project has been heard by the Regional Planning Commission and will be passed on to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR and, therefore, no further response is required.

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		I currently work in conservation in the control of the basic needs. I volunteer for the California Condor Recovery Project as a nest watcher and formerly worked for the City of Monrovia's Parks Department and their Fire Department on wildland urban interface issues.	
RPC-195	Hazards	I coordinated and co-wrote their Community Wildfire Protection Plan. And one of the things that became clear in that is that the amount of wild land urban interfaces that you create magnifies the hazards of wildfire, of wildlife interactions, and geologic hazards, and magnifies the costs to those things. And there could hardly be any way of increasing the amount of wild land urban interface greater than going from zero to plopping a new development within previously uninhabited or very sparsely inhabited areas.	With regard to fire, the EIR appropriately evaluates the Project's potential fire safety impacts under two thresholds of significance. First, the Draft EIR considers whether the Project would expose people or structures to a significant risk of loss, injury or death involving fires because it is located (i) within a Very High Fire Hazard Severity Zone (VHFHSZ), (ii) within a high fire hazard area with inadequate access, (iii) within an area with inadequate water and pressure to meet fire flow standards, or (iv) within proximity to land uses that have the potential for dangerous fire hazard. Second, the Draft EIR considers whether the Project constitutes a potentially dangerous fire hazard. The Draft EIR determined that, with implementation of MM 3-9, Project impacts related to fire hazards would be less than significant under both applicable thresholds of significance. The Draft EIR concluded that Project impacts related to fire safety would be less than significant only after taking into consideration (i) Project site access, (ii) Project site water flows, (iii) Project site topography, (iv) Project site vegetative cover, (v) existing and proposed regulatory controls, (vi) existing mutual aid agreements between federal, state, and local fire safety service providers, and (vii) Project improvements and mitigation measures related to landscaping and vegetation management, building construction, circulation, public utilities, and fire protection services, including but not limited to MM 3-9. This testimony does not specifically address the adequacy of the EIR, and no further response is required. For further discussion of fire impacts, see Draft EIR, Section 5.3, and Final EIR, response to Comment A.2-6.
RPC-196	Biology	And even to the extent that you can mitigate those hazards to people and the costs -- or are willing to bear the monetary costs, there is always a permanent loss to nature. You have to bulldoze buffer areas around our developments. Animals are simply killed because we can't coexist with them -- all the things we have to do.	The Commenter appears to be referring to fuel modification practices to reduce fire risk, and the Commenter's opinion regarding fuel modification and biological resources is noted. The Project is required to implement fuel modification to comply with State and County regulations. Per MM 3-9, the Project must prepare and implement a Fuel Modification Plan to be reviewed by the LACFD Forestry Division. Some Project development is proposed in areas that would be adjacent to large open spaces areas with moderate vegetative cover. Under existing conditions, the plant communities that make up this cover are highly combustible and would, therefore, present a high fire hazard and pose a potentially significant impact to development in these

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			areas. As development of the Project site proceeds, however, fire hazards associated with the natural vegetative cover would be eliminated through its replacement with urban landscape vegetation, which is irrigated and less combustible than the existing vegetation. (Draft EIR, page 5.3-36.) The impacts of fuel modification zones have been accounted for in the analysis of Project impacts on biological resources in Section 5.7, Biological Resources. MM 7-21 on Draft EIR page 5.7-194 prohibits fuel modification zones from encroaching on the adjacent SEA. MM 7-1 on Draft EIR pages 5.7-173 through 5.7-175 prohibits fuel modification in areas occupied by special status plant species (i.e., crownscale and spineflower). As such, fuel modification zones would be located away from open spaces where sensitive biological resources are present and would be confined to areas that are proposed for disturbance. For further discussion of fuel modification, please see Final EIR, responses to Comments F.8-63, F.8-64, G.28-4.
RPC-197	Biology	Regarding condors, they are mentioned in the EIR -- a few flyovers. But how many would you expect now that the population is just back from the brink of extinction. Anyone who has seen -- that has experienced a California condor in the wild dreams of the time when we really do recover the population. But that won't happen if we take away their habitat. So please refuse this -- this Project. Thank you very much.	The Commenter's concern regarding the California condor and conservation of their habitat is acknowledged. The Draft and Final EIR analyzed potential Project impacts on the condor in depth. Independent studies analyzing potential Project utilization by the condor were conducted by t experts on the species (Bloom 2009) and were included as attachments to the Draft EIR (Appendix 5.7-B, Birds-6). As noted on page 2-42 of the Final EIR, condors are extremely infrequent visitors to the Project site. The Project site is on the eastern edge of the historic condor range, and some fly-overs have occurred, although the core flight paths are located to the west of the Project site. Expert analyzation of the Project site concluded that thermal updraft is likely not sufficient over the site to propel the condor into flight. Due to the large size of the California condor, areas of at least moderate topographical relief seem to be required for both thermals and updrafts to facilitate take-off (Allen et al. 2016). For this reason, as well as the record of occurrence, the Project site is not considered important foraging grounds for the species. Observations of flying condors prior to 1987 indicate that, on the few instances that they were known to have flown over valley floor habitat (including the Centennial Project site), the birds were usually flying high over the landscape, probably at an altitude of over 1,000 feet (Bloom 2009). During these flights, the condors rarely, if ever, landed and their movements appeared transitory (Bloom 2009). To date, four GPS location points out of many thousands were in the vicinity of the Centennial Project site (Bloom 2009). As stated on page 5.7-94 of the Draft EIR, no suitable breeding habitat is present and potential foraging habitat is present, but lack of thermals appears to prohibit use of the site. Although there are many flyover records from the site (and 1 landing) and from the surrounding areas, this species is

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			expected to occur only as a relatively rare flyover compared with core habitat in the adjacent mountains to the north and west. The Draft EIR correctly concluded that impacts to condor are less than significant. The USFWS analysis supports this conclusion. However, MM 7-6 is included to further ensure that the proposed Project does not result in future impacts on the California condor. MM 7-6 includes mitigation measures to protect condors during design of the Project, during construction of the Project, post-Project construction, and includes a homeowner Condor Educational Curriculum. To address the Commenter's statement about the future of the species, historical grassland foraging habitat around the base of the San Joaquin Valley remains viable, and large swaths have been protected since about 1984, including the Bitter Creek National Wildlife Refuge (NWR) (5,867 ha), the private Wind Wolves Preserve (39,000 ha), and the Carrizo Plains National Monument (121,405 ha) (Walters et al. 2010).[3319] Additionally, large swaths of foraging and roosting habitat have been preserved on Tejon Ranch that is a critical gateway to historical foraging areas in the Sierra Nevadas.
Myles Lewis			
RPC-198	Introduction	So my name is Myles Lewis. I'm coming from the West Valley. So I come as a native of Los Angeles's legacy of sprawl in the West San Fernando Valley. And like everyone here, I'm sure, I have a deep and abiding relationship to nature, which has been consistently upset by the revelation of all of the ways in which any human development has unavoidably damaged what we all fear to lose through transit, infrastructure, waste management and all forms of resources.	Thank you for your participation in this public process. The Regional Planning Commission heard this testimony and will consider it. It will also be passed on to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR, and no further response is required.

[3319] Walters J. R., et al. 2010. Status of California Condor (*Gymnogyps Californianus*) and Efforts to Achieve its Recover. The Auk, Vol. 127(4):969-1001. The American Ornithologists' Union.

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RPC-199	Miscellaneous	So I appreciate Centennial's care. I deeply appreciate their care in working with broad based environmental input. I would appreciate such care in the retrofitting of existing comparable developments across California and the Nation. But when our priorities have to be making our developed areas more affordable, efficient, and sustainable, I can't see any reasonable decision other than conservation.	The Regional Planning Commission heard this testimony and will consider it. It will also be passed on to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR, and no further response is required.
RPC-200	Miscellaneous	The City and the culture doesn't have the bandwidth to subsidize new concerns, especially in such a deeply important region as is covered by the Project site. And I'd like to end by saying that encouragement of best practices socially is great -- you know, bicycling, electric vehicles, et cetera -- which I know Centennial brought up -- but as a guy who was just hit on my bike by a completely insensitive motorist, you know, who doesn't see a bike because we don't have the culture, and living in an area in the West Valley where people are almost superstitiously suspicious of public transit, as if it is far more dangerous than driving a car. It's just what I experience every day from family and friends. We have to fix what we have rather than exporting this kind of limping good intention to new developments. Thank you very much.	The Commenter's opposition to the Project and preference for revitalizing existing communities has been heard by the Regional Planning Commission and will be passed on to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR and, therefore, no further response is required.
Richard Dickie			
RPC-201	Introduction	Hi. My name is Richard Dickie. I'm a professional photographer and have been photographing California landscapes well over 30 years and counting. I first became familiar with Tejon Ranch after meeting a ranch foreman named George Sanford in the late 1980's. During the spring wild flower seasons George allowed photographers from	Thank you for your participation in this public process. The Regional Planning Commission heard this testimony and will consider it. It will also be passed on to the Board of Supervisors for consideration. Project design takes the surrounding environment into account, and the EIR analyzes impacts on the Project site and areas immediately surrounding it. This comment does not address the adequacy of the EIR, and no further response is required.

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		around the globe onto the ranch to drive around and document the spectacular wonders that are unique to Tejon -- unique to Tejon and nowhere else. I visited the ranch almost a hundred times over the years and documented landscapes from year to year. I've also traveled all over California and documented the few remaining wildflower spots that exist. And nothing compares to the jaw-dropping wonder of Tejon and the adjacent Gorman hills, which is an interconnected issue that needs to be considered if development is allowed on Tejon.	
RPC-202	Miscellaneous	Tejon and Gorman have been compared to Yosemite Valley for their world-class scenery not seen anywhere else on the planet. This area was designated as a sensitive environmental area for good reasons.	The existing visual resources associated with the Project site are disclosed in EIR Section 5.13.4 (pages 5.13-7 through 5.13-11). As discussed in the EIR, the vast majority of the Project consists of open grasslands that are used for cattle grazing. While aesthetically interesting, the Project site does not share the striking visual qualities of Yosemite Valley. Nevertheless, the EIR determined that the Project would result in significant and unavoidable impacts related to a change in visual character experienced from public vantage points (primarily transportation thoroughfares including SR-138, 300th Street West, 290th Street West, and Malinda Avenue). Visual character impacts related to grading and development of the Project would be reduced through implementation of PDFs 13-4 and 13-5, and MMs 7-13, 13-1, 13-2, and 13-3; however, the change of the Project site from a rural to urban condition and the varying degrees of obstruction of existing views of local foothills and the Tehachapi Mountains would be considered a significant unavoidable impact, for which no additional feasible mitigation exists. The Project site has not been identified a Significant Ecological Area under the AVAP. Rather, the Project site is within an area identified as the West EOA, and Project development entirely avoids nearby SEA 17. The Regional Planning Commission heard this testimony and will consider it. It will also be passed on to the Board of Supervisors for consideration. This testimony does not address the adequacy of the EIR, and no further response is required.

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RPC-203	Miscellaneous	Once the infrastructure of roads, water, sewer, and electricity are in place for Centennial City, the adjacent Gorman hills would be developed using the newly installed utilities close by. Then come the off-road vehicles that will whiz across the landscape and the hikers and dog walkers that will want to go off path, invasive plants that will take hold in the new disturbed soil, and the illegal trash dumps that no entity seems to be able to control will be the result. If you build it, they will come along with the human nature and the inevitable urban impact.	The Commenter's opinion with regard to growth-inducing impacts was heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. With regard to the proposed Project's impacts in comparison to existing Project site conditions, the Draft EIR conservatively concludes that the existence of the Project makes it reasonably foreseeable that additional development proposals seeking AVAP amendments could be made outside the West EOA, which is considered a significant, adverse indirect growth-inducing impact. Draft EIR, Section 7.0, Cumulative Impacts, pages 7-19, and Section 6.0, Growth-Inducing Impacts, pages 6-6 to 6-9. To the extent this comment implies that the EIR is deficient unless it analyzes the cumulative impacts of future development that may be induced by the Project, the comment is mistaken. As provided in CEQA Guidelines § 15126.2(d), the EIR analysis of growth inducing impacts need only discuss "the ways in which the proposed project could foster economic and population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment." The Court of Appeal has confirmed that "[n]othing in the Guidelines, or in the cases, requires more than a general analysis of projected growth." See *Napa Citizens for Honest Gov't v. Napa County Bd. of Supervisors* (2001) 91 Cal.App.4th 342, 369. The EIR meets this analytical standard and CEQA does not require the EIR to analyze the cumulative environmental effects of such projected growth. In any case, such analysis would require the Lead Agency engage in pure speculation as to the type, size, location and timing of future growth, which is not permitted under CEQA Guideline § 15145. For further discussion of growth-inducing impacts, see Draft EIR, Section 6.0, Growth-Inducing Impacts, and Final EIR, responses to Comments F.8-47 through F.8-49.
RPC-204	Conclusion	Once you break it, you'll never be able to fixes it. This is a special place it's the last of an amazing legacy. I ask you to clearly consider the decision you're about to make. This area deserves to remain an intact sensitive environmental area as originally planned for. The investors bought the property with eyes wide open, knowing the risk of trying to develop it. This definitely does not fit an infill housing need as	The Commenter's opposition to the Project was heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR, and therefore no further response is required.

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		proposed by one of the developers. We all know better than that. This is an extremely exquisite, remote, pristine habitat. I ask that you please leave it as is. And I would like to provide documentation to the commissioners. Thank you.	
Stephanie Pincetl			
RPC-205	Introduction	Stephanie Pincetl. Good morning, Staff and Commissioners. It's very nice to be here again. I have submitted some comments. And since the new documentation's come in, I will also submit more comments because in three minutes you really can't begin to scratch the surface. I would like to raise a couple of issues that have not been raised by either the EIR or the Staff or anyone else. And that -- these are -- they are the following:	Thank you for your participation in this public process. The Regional Planning Commission heard this testimony and will consider it. It will also be passed on to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR, and no further response is required.
RPC-206	Housing	One of the persuasive arguments is that the region needs more housing. Of course, we need more housing, but not at this location. And let's look at it a little more closely for some other reasons.	The Commenter's opposition to the Project has been heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR, and therefore no further response is required.
RPC-207	Climate Change	By mid-century, annual average maximum temperatures will exceed 100 degrees and, by the end of the century, may go up to nearly 130 degrees on hot days. By mid-century, there will be 20 to 40 additional extremely hot days and by the end of the century 60 to 90 extremely hot additional days. These will have serious impacts. Public health and any outdoor activity will be impaired. Think Phoenix. No walking, no biking even if you were able to go for coffee and out with friends, ride your bike to school, or go shopping. Impacts on the grid, despite the offset approach to Zero-Net electricity will be inevitable. And this I	The Commenter's suggestion that surface temperatures on the Centennial Project (Project) site will soon exceed "130 degrees" due to climate change are inaccurate. Global climate change is discussed in detail in Draft EIR Section 5.21, Climate Change. As discussed on page 5.21-39 of the EIR, according to California's 2012 Vulnerability and Adaptation Study, the State's third major assessment on climate change, modeling results from a high emissions scenario developed by researchers at UCLA indicate that mountain and inland areas of the Los Angeles region could warm up to or greater than 4.5 degrees Fahrenheit (°F) by mid-century. The high emissions modeling scenario also indicates that the number of heat days in unincorporated areas of the County may increase by nearly 12-fold. As discussed on page 3-2 of the EIR, data from the Western Regional Climate Center show that the average annual temperature on Tejon Ranch from 2012 to 2014 was 67 °F, and that temperatures of 100 °F or more were uncommon. If the potential high emissions scenario modeling results summarized in the EIR were to occur in

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		will write more detail for the Commission's interest. With this kind of heat, regardless of generation -- let's say it's being generated farther away -- there will be electricity, with solar -- there will be up to a 20 percent capacity loss, not to mention interruptions in service and component breakdown. Severe heat is severe heat. With current policy, people will be paying very high rates for time of use electricity when there is no solar generation. And that happens to be when they're coming home in the evening. So even if it's zero net electricity, that does not mean there will not be natural gas power plant generation for the evening needs.	the future, temperatures and the number of heat days at the Project site would increase, but not to the extent that average or maximum daily temperatures would regularly exceed, or even come close to, the 130 °F levels suggested by Commenter.
RPC-208	Miscellaneous	So I know my time is very short, but I will amplify those comments significantly in my written testimony.	This comment does not address the adequacy of the EIR, and no further response is required.
RPC-209	Water Supply	I just want to make one other point today. The Project points to the State Water Project essentially for water supply. That Project is currently five times over-allocated. Everybody's promising State Water Project. This means that the State Water Project isn't really available -- that water, particularly when there will be times of drought. And we know that there will be. Instead, you will be robbing Peter to pay Paul with water transactions. And lots of choices will have to be made there about priorities in water use.	The Commenter's opinion regarding the reliability of the State Water Project was heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. However, the County disagrees and concludes that Project EIR analysis demonstrates reliable and sustainable water supplies, including with regard to water from the State Water Project. After thorough analysis, the EIR appropriately concludes that Project water supplies will sustainably meet buildout potable and recycled water demands and would in fact maintain an average annual reserve supply in the two Project water banking facilities of more than 79,000 acre-feet after buildout has been achieved. This surplus would persist over time based on an 82-year hydrologic period of record, including single-dry and multiple-dry years, and taking account of potential climate change impacts. With regard to the reliability of imported water supplies for the Project, the potential delivery reliability and variability of Project State Water Project supplies is discussed in Draft EIR Section 5.18, Water Resources, pages 5.18-20 to -28, and -54 to -64. The analysis of Project imported water supplies uses the Early Long Term scenario also used in the California Department of Water Resources' State Water Project Delivery Capability Report, and incorporates the effects of the most severe droughts during the 82-year historical record, plus additional adjustments to account for potential climate change effects and

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			the 5 percent single-dry year delivery level used by the Antelope Valley-East Kern Water in the Agency's 2015 Urban Water Management Plan. Consequently, the Draft EIR includes a discussion of State Water Project delivery reliability that is consistent with the conservative Early Long Term scenario developed in the Delivery Capability Report and the same scenario, with a reduced single dry year reliability level, used in the Antelope Valley-East Kern Water Agency's 2015 Urban Water Management Plan. Commenter provides no evidence to dispute EIR analysis, and no further response is required.
RPC-210	Conclusion	So I will follow up with more comments. But thank you very much for your time today. And I hope to be in further discussions with you all. Thank you.	The Regional Planning Commission heard this testimony and will consider it. It will also be passed on to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR, and no further response is required.
Jack Ite			
RPC-211	Introduction	Good day. My name is Jack Ite. I'm an Urban Planner with Wild Heritage Planners and a Co-Founder of So. Cal. 350 Climate Action. So I've worked on a lot of large-scale development projects. A few years back I did a totally rethinking of the Rancho Mission Viejo project, which was proposing 14,000 units down in Orange County. We were able to protect a good percentage of that land there. I worked on East Orange. I worked on Tejon Mountain Village. I put a suggestion out to the Kern County Board of Supervisors that they totally reduce that Project. They ignored what I put down for the project, which they approved, which was highly unfortunate. I also -- I am working on the Banning Ranch Project, which a protected 400 acre site there that the Coastal Commission protected basically because of the burrowing owl, which is very significant here.	Thank you for your participation in this public process. The Regional Planning Commission heard this testimony and will consider it. It will also be passed on to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR, and no further response is required.

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RPC-212	Greenhouse Gas	I think this is a totally inappropriate area for development, which has been stated. But I want to take on some issues with Net-Zero, SB 375 in terms of sustainable communities and the correlation with Cap and Trade.	This comment's general opposition to the Project location is noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration. With respect to the Project's consistency with the regional planning efforts being undertaken in compliance with SB 375, please see response to Comment F.8-20. With regard to this comment's reference to "net zero," the Project has made a commitment to achieve a "net zero carbon for the electric sector" standard on all public and private facilities constructed within the Project, which means that carbon emissions created to produce electricity that is consumed within the Specific Plan area will be offset with an equivalent amount of carbon emission reductions that result from quantified greenhouse gas emission reductions as documented over time as part of each application for a tentative tract map.
RPC-213	Greenhouse Gas	I guess -- just first thing is the cap is massive, meaning it's our carbon budget. So if you have tons of money in your account and you can go out and spend it however you want, that's fine. But when you have a cap, you're very limited. So if we're going to expend our budget on building housing in an area where there's absolutely no infrastructure -- there's no roads. There's no electricity. There's no sewer. There's no water. It's totally hot as heck. And it's disconnected from everything -- we are wasting our carbon budget. So I would submit that Cap and Trade should be pushed aside.	This comment's opposition to the Project and to California's cap-and-trade program are noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration. It should be noted, however, that the Project is not itself subject to the cap-and-trade program, though the producers of the fuel and electricity needed to construct the Project are generally subject to cap-and-trade. As this comment notes, under California's cap-and-trade program, the State sets an emissions cap and issues a quantity of emission allowances consistent with that cap. Regulated emitters (e.g., fuel and electricity producers) must hold allowances for every ton of greenhouse gas they emit. The regulated emitters may buy and sell allowances, thus establishing an emissions price. Moreover, regulated emitters that can reduce their greenhouse gas emissions at a lower cost may sell their any excess allowances to other covered entities facing higher compliance costs.
RPC-214	Land Use Population/ Housing	Now, in terms of 375 -- SB 375, Sustainable Communities -- yes, it's one thing to put housing next to walkable areas, put a school in there. But, unfortunately, if you're going to start talking jobs/housing balance, and you can say, well, they're going to balance it. No. It will never be balanced because people will be driving from far away to work in those offices, and people living there will be driving far away to go to other offices. There will be no balance. Whether you can show me something up on the screen that it's balanced -- it will never be balanced. So that is completely fallacious. And SB 375, again, is part of that. It's a	The Project's land use plan would provide an estimated jobs/housing ratio of 1.22 through the development of commercial and business park uses on the site, thus positively contributing to the attainment of the AVAP's targeted jobs-to-housing ratio. With regard to this comment's query regarding the EIR's job growth assumptions, as explained in EIR Section 5.9.3 (pages 5.9-18 through 5.9-22, and pages 5.9-29 through 5.9-30), such assumptions are based on regional employment growth projections published by the Southern California Association of Governments (SCAG), which SCAG adopted as part of its 2012 and 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) planning documents. With respect to the Project's consistency with the RTP/SCS, please see Final EIR, response to Comment F.8-20.

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		sustainable community, but it's not taking into account the regional issue that we're facing here.	
RPC-215	Miscellaneous	And this region makes no sense. I would be one to get up and say let's reduce the site of this project. Let's find the most important habitat and protect that, and maybe we can build on a bit of it. If you told me a community the size of Frazier Park, which has, I don't know, 5,000 -- if you told me they wanted to build that community here, maybe we could talk.	The Commenter's opposition to the Project has been heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR, and therefore no further response is required.
RPC-216	Biology	And even that would be a major impact because we're talking critical habitat for the California condor. We're talking major species that would be impacted.	The Commenter's opinion with regard to even a smaller project on the Condor was heard by the Regional Planning Commission and will be provided to the Board of Supervisors. However, the EIR appropriately analyzes potential Project-related impacts to California condor and concludes that impacts would be less than significant. Requirements in MM 7-6 would further reduce impacts to California condor. For further discussion specific to California condor, see Draft EIR, Section 5.7, pages 5.7-94, -119, and -120 and Final EIR, responses to Comments B.4-20 to B.4-23, and F.8-138 to F.8-143.
RPC-217	Hazards	We're talking massive risk of wildfire. We're talking dangerous issues. I mean wildfire -- if you look at the burning that happened in December and October of last year, it was through historic wildfire areas. It didn't matter how much they reduced the brush. It didn't matter how much they changed the land. When that fire swept down into Santa Rosa, it was unstopable because the winds -- the Santa Ana winds now are much worse than they ever were and because of the droughts, which are coming -- droughts are going to be happening. Suddenly the dry season goes into the Santa Ana season. When those Santa Ana winds start blowing through that valley, this community will burn. I guarantee it.	With regard to fire, the EIR appropriately evaluates the Project's potential fire safety impacts under two thresholds of significance. First, the Draft EIR considers whether the Project would expose people or structures to a significant risk of loss, injury or death involving fires because it is located (i) within a Very High Fire Hazard Severity Zone (VHFHSZ), (ii) within a high fire hazard area with inadequate access, (iii) within an area with inadequate water and pressure to meet fire flow standards, or (iv) within proximity to land uses that have the potential for dangerous fire hazard. Second, the Draft EIR considers whether the Project constitutes a potentially dangerous fire hazard. The Draft EIR determined that, with implementation of MM 3-9, Project impacts related to fire hazards would be less than significant under both applicable thresholds of significance. The Draft EIR concluded that Project impacts related to fire safety would be less than significant only after taking into consideration (i) Project site access, (ii) Project site water flows, (iii) Project site topography, (iv) Project site vegetative cover, (v) existing and proposed regulatory controls, (vi) existing mutual aid agreements between federal, state, and local fire safety service providers, and (vii) Project improvements and mitigation measures related to landscaping and vegetation management, building construction, circulation, public utilities,

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			and fire protection services, including but not limited to MM 3-9. This testimony does not specifically address the adequacy of the EIR, and no further response is required. For further discussion of fire impacts, see Draft EIR, Section 5.3, and Final EIR, response to Comment A.2-6.
Dr. Sandra Namoff			
RPC-218	Introduction	Hello. Thank you for allowing me to speak today. My name is Dr. Sandra Namoff. And I'm a resident of L.A. County's First District. I'm here today to strongly oppose the Centennial Specific Plan. Everyone here has an interest in Tejon Ranch. My interest comes from the perspective of an evolutionary biologist. For my Doctoral research, I studied the processes that led to diversification of morning glory species in California.	Thank you for your participation in this public process. The Commenter's opposition to the Project has been heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR, and therefore no further response is required.
RPC-219	Biology	My research indicates that over the last million years, the Southern Tehachapi Mountains, including Tejon, have been integral to the processes that have led to diversification of this group in Western North America. The region is exceptionally important to ecological speciation because it connects the cool coastal habitats to deserts land, mountains and beyond.	The Commenter's concern regarding the significance of the Project region as an important ecological region, specifically for speciation, is noted. It is generally agreed that the Project region is ecologically important for many reasons. The description of the primary resources within SEA 17, which occurs within the Project region and partially on the Project site, includes wildlife movement and the mosaic of habitats along the San Andreas Fault Zone. The area encompasses an important linkage between the San Gabriel Mountains and the Tehachapi Mountains, representing the only mountain linkage from the Transverse Ranges or the Pacific Coast Range to the Sierra Nevada Range (PCR et al. 2000). As noted on page 5.7-8 of the Draft EIR, SEA 17 is identified as significant due to position within a region where multiple diverse biomes (a community of plants and animals) and wildlife corridors come together. It contains a unique mosaic of vegetation types that represent a transitional area between the Mojave Desert, the Coast Ranges, and the Tehachapi Mountains. Much of this important land is included in the Project's proposed Mitigation Preserve. The proposed 43,080-acre mitigation preserve system contains all major habitat types affected by the Project, as well as particular individual biological resource values. The biological value of the proposed preserve system is further enhanced by its continuity with other open space areas. While it is acknowledged that the Project site occurs within this important ecozone, vast swaths of biologically rich land is preserved through the Project's mitigation process. Additionally,

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			there is no evidence to suggest that biological processes necessary for continued speciation would be negatively affected by Project implementation.
RPC-220	Biology	We can choose to continue to allow this habitat to play a role as a functional ecosystem for millenia to come, or we can choose to allow a development plan that will create outdated -- an outdated sprawl-type community. I strongly believe that it's imperative to maintain the area within the Centennial Specific Plan as a functional ecosystem where evolutionary processes can function in the absence of further human disturbances.	The Commenter's preference for preservation of the entire Project site is noted, was heard by the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. The County notes that the Project is not sprawl development, as discussed in detail in Final EIR, response to Comment F.8-20. This testimony does not address the adequacy of the EIR, and no further response is required.
RPC-221	Miscellaneous	I'm also here to express my aversion to the tactics that the Tejon Ranch Company has taken to silence the scientific community. I was shocked and dismayed by the article published in the Mountain Enterprise less than a week ago that details a systematic effort to prevent anyone from visiting or studying Tejon Ranch who has expressed formal opposition to Centennial. And I realize this now includes me.	This testimony and the Mountain Enterprise article are noted, have been provided to the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. This comment does not specifically address the Project or the adequacy of the EIR, and no further response is required under CEQA. However, for informational purposes the County notes that many scientists have been and continue to be allowed access to the ranch per the RWA and RWMP, and thorough, independent scientific review of Tejon Ranch, including the Project site, has been completed. The Project Applicant also addressed this article in its July 11, 2018 testimony to the Regional Planning Commission, explaining that the RWA does not provide unrestricted public access to Tejon Ranch, but rather provides the express right to withhold access permission. The Applicant further explained that its intention has been to deny access to Center for Biological Diversity and their partner organization, the California Native Plant Society, who have active, ongoing litigation against Kern County, Los Angeles County, and Tejon Ranch regarding Tejon Ranch projects.
RPC-222	Miscellaneous	The mere existences of a black list will cause scientists to hold back their opinions, as being banned from Tejon may damage their ability to do future research. This will have a chilling effect on the very community of scientific advisors that Tejon Ranch should need and want to help them effectively manage their land. The black list	This testimony has been heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. The Commenter's opinion is noted. With regard to ranch access, please see Response to Testimony RPC-221. This testimony does not specifically address the Project or adequacy of the EIR, and no further response is required.

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		amounts to an attack on free speech, and it should not be tolerated.	
RPC-223	Miscellaneous	While I recognize that Tejon Ranch is private land, it is true that tax payer dollars were used to purchase conservation easements on Tejon. And public access is a central tenet of the 2008 Conservation Agreement. And I agree with the article's assertion that the black list is against the spirit of the 2008 Agreement.	This testimony has been heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. The Commenter's opinion is noted. With regard to ranch access, please see Response to Testimony RPC-221. This testimony does not specifically address the Project or adequacy of the EIR, and no further response is required.
RPC-224	Conclusion	The Regional Planning Commission has a choice. It can promote development that puts the people of L.A. first, or it can cater to billionaire hedge fund investors of the Tejon Ranch Corporation. Please make the right choice and say no to the Centennial Specific Plan. Thank you very much.	Thank you for your participation in this public process. The Commenter's opposition to the Project has been heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR, and therefore no further response is required.
Dr. Nicholas Jensen			
RPC-225	Introduction	Good morning. Thank you very much for hearing me this morning. I am Dr. Nicholas Jensen. I'm the Southern california Conservation Analyst for the California Native Plant Society. As part of my dissertation research I produced the first comprehensive catalog of the plants of Tejon Ranch. I'm a Los Angeles County resident in District 1. The California Native Plant Society opposes this project as both scientists and Californians. Not only is this project bad for nature, it is bad for people.	Thank you for your participation in this public process. The Commenter's opposition to the Project has been heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR, and therefore no further response is required.
RPC-226	Housing	With the Centennial Project, the Tejon Ranch Company has initiated an impressive display of public deception. The company wants us to believe that developments like this will solve our very real housing crisis. But what we really need is affordable housing near centers of work. The reality is so distorted that Barry Zoeller, Vice President of Corporate Communication Investors	The Commenter's opinion with regard to Project location is noted, was heard by the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. The Project site is not an infill site. However, it provides development on a site planned to accommodate projected growth in a manner consistent with regional strategies for achieving mandatory reductions in GHG emissions attributable to the land use sector. The Project has been sited and designed to promote regional "smart growth" planning principles established by the Southern California Association of

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		Relations called Centennial "Infill Development" on KPCC just a couple weeks ago. The Tejon Ranch Company wants us to believe that developments like this will solve our very real housing crisis, but what we really need is affordable housing near centers of work.	Governments' (SCAG) 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy and the County's Antelope Valley Area Plan (AVAP) for the purpose of accommodating regional growth projections in a sustainable manner that reduces criteria air pollutant and GHG emissions and promotes public health while protecting regional open space, Sensitive Ecological Areas and agricultural areas consistent with the AVAP's Rural Preservation Strategy. See Final EIR, response to Comment F.8-20 for further discussion.
RPC-227	Biology	At the RPC hearing on June 9th, Michael Jocelyn testified that the grassland habitats on Centennial were not valuable. This opinion -- and I place full emphasis on the word "opinion" here -- is counter to what I and many other scientists have observed on Tejon Ranch. I implore the Tejon Ranch Company to provide the public with the data that supports the assertion that the grasslands on Centennial are not of statewide conservation importance.	The Commenter's opinion regarding Michael Joselyn's testimony is noted, was heard by the Regional Planning Commission, and will be provided to the Board of Supervisors. The County notes that Michael Joselyn summarized his work studying Tejon Ranch to help identify portions of the ranch most suitable or conservation, and most suitable for development. The EIR thoroughly and appropriately documents the grassland study done on the Project site. Draft EIR Section 5.7, Biological Resources, discloses the Project's potential impact to grasslands and determines that direct and indirect impacts would be mitigated to a less than significant level, but cumulative impacts to native grasslands would be a cumulative significant impact. (Draft EIR, pages 5.7-158, -162.) Project implementation would include mitigation at a ratio of at least 2:1 for grasslands, resulting in improved functions and values of grasslands on the Project site, in addition to preservation in perpetuity within the Centennial Mitigation Preserve as described in PDF 7-1 on page 5.7-135 of the Draft EIR. Intensive, multi-year grassland studies have revealed that grasslands of equal or greater value occur in vast quantities in the Mitigation Preserve. Please see Final EIR, responses to Comments B.4-17, B.4-43, B.4-63, F.7-22, F.8-124, F.8-125, F.8-127, F.8-128, and F.8-131 for further discussion of grasslands.
RPC-228	Geology	Furthermore, Tejon Ranch continues to ignore the fact that Centennial is a proposed city in a dangerous location. We've heard a lot of people talking about wildfire risks so far this morning. The project is situated at the junction of the two largest faults in California -- the San Andreas and the Garlock. The San Andreas fault, in particular, poses a grave danger to Centennial. It is a matter of when, not if the San Andreas produces another large earthquake in this area.	The EIR thoroughly and appropriately analyzes potential Project-related impacts due to fault location and seismic risk, and both compliance with State and County requirements and Project-specific mitigation measures would ensure impacts are less than significant. Please see Response to Testimony RPC-193 for further discussion regarding seismic impacts and faults. With regard to wildfire risks, please see Response to Testimony RPC-195.

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RPC-229	Geology	For example, on January 9th, 1857, at 8:20 A.M. a magnitude 7.9 earthquake struck near Parkfield, California. Because Forte Tejon was the nearest inhabited location to the epicenter, this earthquake is known as the Forte Tejon earthquake. It is the largest earthquake in recorded history in California. Benjamin Star, the former mayor of Los Angeles, noted that not a single structure at Forte Tejon was left standing. A fissure, 30 to 40 miles long, was opened in the ground. Cattle were vaulted in the air and rolled down hillsides. Mature trees were broken off at the ground level. Tejon Pass was blocked for months by massive landslides. And this was from an earthquake that occurred that was 120 miles to the northwest of Centennial.	The EIR thoroughly and appropriately analyzes potential Project-related impacts due to fault location and seismic risk, and both compliance with State and County requirements and Project-specific mitigation measures would ensure impacts are less than significant. Please see Response to Testimony RPC-193 for further discussion.
RPC-230	Geology	Not if, when this happens again, Centennial will be in the bullseye. A proposed community of 60,000 people will be destroyed and survivors in this leap-frog -- not infill -- development will be cut off from help. This is clearly a proposed new city in a dangerous place. I urge you to reject the Centennial Specific Plan.	The EIR thoroughly and appropriately analyzes potential Project-related impacts due to fault location and seismic risk, and both compliance with State and County requirements and Project-specific mitigation measures would ensure impacts are less than significant. Please see Response to Testimony RPC-193 for further discussion. While the Project site is not an infill location, the Project has been situated and designed to promote "smart growth" planning principles established by SCAG's 2016 RTP/SCS and the County's AVAP for the purpose of sustainably accommodating regional growth projections in a manner that reduces criteria pollutant and greenhouse gas emissions and promotes public health. Please see Final EIR, responses to Comments F.8-20, F.8-191, and F.8-204 for further discussion.
RPC-231	Grazing	I don't think grazing should be seen as an evil thing in all cases. I think what should be proposed, if – Okay. If grazing is to be permitted in the mitigation lands, I think there should be science that backs up that management decision. And that would be by doing, you know, multi-year studies that showed that these exact habitats that are being used for mitigation can support cattle while promoting the diversity of native species. And so I don't know what has been done so far in that, necessarily. But I would propose that as a -- as a course of action	The grasslands on Tejon Ranch have been grazed by cattle for approximately 150 years continuously. (Draft EIR, Section 3.0 Environmental Setting, pages 3-1, 3-4) It is not possible to know the exact effects the cattle grazing has had on the pre-grazed habitat in this area due to lack of data on the pre-grazed plant and wildlife composition and habitat condition. It has been speculated that California's grassland invasion by non-native weedy plant species may have occurred whether cattle grazed in the region or not due largely to out-

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		going forward. So a detailed scientific study that ensures that that is the right management regime for those mitigation lands.	competition for resources and greater seed production.[3320,3321,3322] While it is not possible to know exactly how cattle grazing on Tejon Ranch affected the vegetation and species composition, it is reasonable to speculate that due to the length of time which grazing has occurred on these lands, and the consistent management regime, the species composition, cover, and species richness of the grassland is likely in a stable state, and the forces/pressures cattle exert on the land is not greatly fluctuating. The grazing management regime on the ranch has been season-long "continuous" grazing which is solely tied to the availability of plant material for forage on the site (not species specific). The intensity and duration of grazing in any particular area of the Centennial site or surrounding Tejon lands, including areas within the Project's Mitigation Preserve, has consistently fluctuated from year to year and month to month dependent on availability of forage. Forage availability, as expected, is closely correlated with weather conditions, particularly precipitation quantity and timing, which consistently fluctuates from year to year within a relatively predictable range which include periods of drought. As with all existing grasslands in California, the grasslands on the Ranch are comprised of a mosaic of non-native invasive species and natives. Exotic invasive species include wild oats (*Avena* spp.), annual grasses such as red brome (*Bromus madritensis* subsp. *rubens*) and ripgut brome (*Bromus diandrus*), and forbes such as round-leaved fillaree (*Erodium cicutarium*), and black mustard (*Brassica nigra*) (Draft EIR pages 5.7-40 and -41). Native species include perennial bunchgrasses such as needle grass (*Stipa* spp.) and one sided blue grass (*Poa secunda*) as well as native forbs such as lupine (*Lupinus* spp.) (Draft EIR pages 5.7-40 and -41). Some remnant patches contain high native cover and species diversity, while most areas are dominated by non-natives and contain very little native cover or species diversity (*Id.*, pages 5.7-25 through 5.7-28). There is great interest in California to restore grassland areas to a composition that more closely resembles a pre-European contact condition. The overall goal in grassland restoration is generally to reduce cover of non-native invasive annual grasses while increasing cover and species diversity of native species. Grazing is often proposed as a cost-effective option for weed control on rangelands. Grazing can be employed as a tool in restoration

[3320] Heady, H.F. 1977. Valley grassland. Pages 491–514 in M.G. Barbour and J. Major, eds., Terrestrial Vegetation of California. Wiley, New York.
[3321] Bartolome, J.W., and B. Gemmill. 1981. The ecological status of Stipa pulchra (Poace-ae) in California. Madroño 28(3):172–184
[3322] Murphy, D.D., and P.R. Ehrlich. 1989. Conservation biology of California's remnant native grasslands. Pages 201–211 in L.F. Huenneke and H.A. Mooney, eds., Grassland Structure and Function: California Annual Grassland. Kluwer Academic, Dordrecht.

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			activities by exerting pressure on invasive annuals while allowing native perennials to mature. Goats, sheep, or cattle are used to effectively "mow" select exotic annual species which are often more palatable to the animal than the native perennials early in the growing season (Stromberg et al. 2007). The foraging preference differs between animals, for instance sheep typically favor forbs, while cattle generally prefer grasses (Stromberg et al. 2007). Non-native annuals can produce a thick layer of "thatch" or mulch that eliminates growing space for native plants. One cow will consume approximately 27 pounds (dry weight) of forage per day, or almost 5 tons of forage per year.[3323] Most research on how grazing may affect California grasslands has been focused on the introduction of cattle to areas devastated by exotic invasive species, and how the native species composition changes over time. However, there is some mention in the literature on the effects of removal or exclusion of cattle from areas that have been grazed long-term, such as Tejon Ranch. One study, which looked at Bureau of Land Management (BLM) grazing allotment known as Bear Creek Unit of the Cache Creek Natural Area in Colusa County, California. The Bear Creek Unit includes 7,360 acres suitable for grazing and consists of a patch-mosaic of annual grasslands, blue oak woodlands, and serpentine chaparral plant communities. Until 2001 the land had been continuously grazed during the growing season. The BLM removed cattle when it purchased the land in 2001 in an effort to enhance native plant cover. In the four years following the cessation of grazing, BLM documented increased invasive weed cover and high accumulations and persistence of vegetative litter (Davy et al. 2015). Grazing was re-introduced to the Bear Creek Unit in 2006. A meta-analysis of existing research on cattle grazing effects on California grasslands concluded that exclusion of cattle from areas previously grazed does not return these areas to native dominant, and in fact exotic plants persist as a major element of the vegetation.[3324] The same meta-analysis concluded that the majority of evidence suggests that properly managed livestock grazing can increase native bunchgrass abundance in California grassland habitats in some situations.[3325] Much of the research suggests that "prescribed grazing" can lead to increased native

[3323] Barry S., Bush L., Larson S., Ford L. D. 2015. Understanding Working Rangelands, The Benefits of Grazing – Livestock Grazing: A Conservation Tool on California's Annual Grasslands. University of California Agriculture and Natural Resources. ANR Publication 8517. University of California: Richmond, CA.

[3324] D'Antonio, C.M., Bainbridge, S., Kennedy, C., Bartolome, J., and Reynolds, S. 2001. Ecology and restoration of California grasslands with special emphasis on the influence of fire and grazing on native grassland species. Unpublished report to David and Lucile Packard Foundation, Los Altos, Calif.

[3325] Ibid.

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			cover and diversity. Prescribed grazing refers to the controlled timing (season), frequency, and intensity (animals per acre) of grazing. This controlled management regime protects native plant ecology (of target species) while reducing non-native biomass. For example, a recent study showed that purple needlegrass responds positively to early spring time grazing coupled with reduced grazing during the flowering period.[3326] Additionally, a study on Tom Kat Ranch in Pescadero, California, found that switching from season long continuous grazing to planned or prescribed grazing appears to have facilitated the restoration of native perennial grasses.[3327] Grazing on Tom Kat Ranch went from season-long continuous grazing where cattle were often split into multiple herds and left out over large portions of the ranch for several months at a time (providing plants with little rest between grazing periods) to a planned approach where cattle density was increased by putting them in small blocks and moving them quickly through subdivided fields. Grazing lasted one day to one week, providing plants with 70-120 days of rest. Native grass cover remained small (<5 percent) but increased over time from 2011 to 2013 (See Figure 1).[3328]

[3326] Melvin R. George, Stephanie Larson-Praplan, Morgan Doran, Kenneth W. Tate, Grazing Nassella: Maintaining Purple Needlegrass in a Sea of Aggressive Annuals, Rangelands, Volume 35, Issue 2,2013, Pages 17-21, ISSN 0190-0528, https://doi.org/10.2111/RANGELANDS-D-12-00077.1.

[3327] Henneman C., Seavy N. E. 2014 (December). Restoring Native Perennial Grasses by Changing Grazing Practices in Central Coastal California. Ecological Restoration. 32:4.

[3328] Ibid.

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			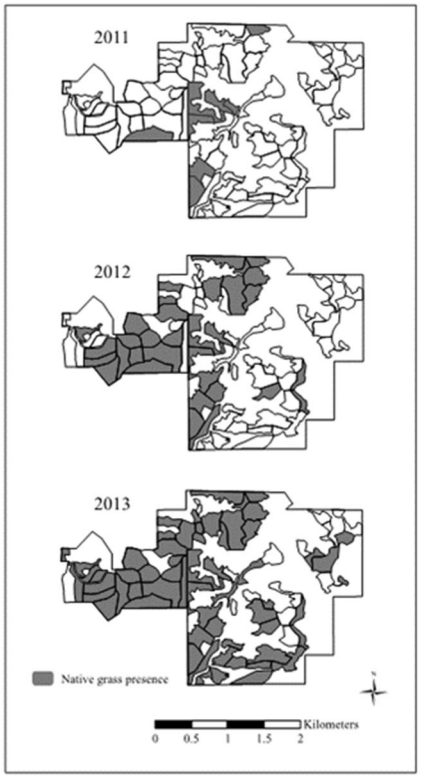 **Figure 1. 74 vegetation survey units with native grasses detected (shaded areas) during vegetation surveys from 2011–2013 at TomKat Ranch, Pescadero, CA.** Another study on the impacts of cattle grazing on a coastal California prairie found that native forb species richness and cover were higher in grazed sites. The study also recorded higher exotic annual grass and forb cover on grazed sites (native annual forbs: grazed=29, ungrazed=18; exotic annual forbs: grazed=60, ungrazed 52), and the number of native perennial forb species was higher in ungrazed sites (grazed=83, ungrazed=107). Native grass cover

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			and species richness did not differ in grazed and ungrazed sites.[3329] This research highlights the fact that grazing can be beneficial to some native guilds, but also may have negative consequences for others. It can be concluded that a site-specific, adaptive approach to grassland management is likely to result in a net benefit to native grasslands. It should be noted that the level of grazing, both intensity and duration, is expected to decrease as a result of the Project. Because all of the lands within the Mitigation Preserve are currently grazed, the continuation of grazing, as directed by results of long term biological monitoring, is expected to be approximately the same. As mentioned previously, the existing conditions of the grasslands on the Project site and the Mitigation Preserve is largely due to the effects of grazing and that condition is considered special and worthy of protection and mitigation for losses as described in the Draft EIR (pages 5.7-158 through 160). The proposed approach to grazing for the benefit of grassland values, therefore, is expected to be similar to the past grazing regime to ensure current conditions persist. Substantial changes in the grazing regime would be considered risky due to the unknown outcome and potential challenge of returning to current conditions in the event of a reduction in nativeness resulting from such changes. Adaptive management is instead expected to implement small changes over long periods of continued monitoring. The reduction in the level of grazing is strictly due to the removal of approximately 7,453 acres of grazing lands within the project development areas.
Elena Bowman			
RPC-232	Introduction	My name is Elena Bowman, and I am a botanist and part of CMPS, San Gabriel Valley. But I'm here also as a private citizen.	Thank you for your participation in this public process. The Regional Planning Commission heard this testimony and will consider it. It will also be passed on to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR, and no further response is required.
RPC-233	Housing	I do understand the need of new housing very much. But it seems to me that this project is the most possible worse area considering the fire hazard, the Valley Fever, the earthquake fault zone, the air quality that was discussed.	The Commenter's opinion with regard to Project location is noted, was heard by the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. The EIR thoroughly analyzes potential Project-related impacts in areas identified by the Commenter and identifies mitigation measures to reduce impacts to the greatest extent feasible. See Draft EIR, Section 5.3 with regard to fire hazard, 5.11 with regard to Valley

[3329] Hayes G. F., and Holl. K. D. 2003 (December). Cattle Grazing Impacts on Annual Forbs and Vegetation Composition of Mesic Grasslands in California. Conservation Biology. Pages 1694-1702. No 6. University of California Santa Cruz: Santa Cruz, CA.

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			Fever and air quality more generally, and 5.1 with regard to earthquake fault zones. This testimony does not address the adequacy of the EIR, and no further analysis is required.
RPC-234	Miscellaneous	And, lastly, it seems to be much better to use this money to improve the communities we already have in the area. So that's my comment.	The Regional Planning Commission heard this testimony and will consider it. It will also be passed on to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR, and no further response is required.
RPC-235	Conclusion	I wish you could get the same excitement in improving what we have instead of putting the excitement in building something new and futuristic like this in this scale that we have.	The Regional Planning Commission heard this testimony and will consider it. It will also be passed on to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR, and no further response is required.
RPC-236	Greenhouse Gas	And also I think the Zero-Net idea is unattainable. Thank you.	The Commenter's opinion is noted, was heard by the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. With regard to this comment's reference to "net zero ideas," in the proposed Project development agreement, the Project has made a commitment to achieve a "net zero carbon for the electric sector" standard on all public and private facilities constructed within the Project, which means that carbon emissions created to produce electricity that is consumed within the Specific Plan area will be offset with an equivalent amount of carbon emission reductions that result from quantified greenhouse gas emission reductions as documented over time as part of each application for a tentative tract map. The Commenter provides no evidence to support its assertion that this commitment is unattainable, and this testimony does not specifically address the adequacy of the EIR. No further response is required.
Marta Segura			
RPC-237	Introduction	Good morning, everyone. My name is Marta Segura. And I'm currently with the -- I am the Southern California Engagement Director for the Center for Biologic Diversity. But I was the Planning Commissioner under Mayor Garcetti for about three years. I'm going to talk about how equity for L.A. County is incompatible with the financialization of our public resources and specifically the Centennial Development.	Thank you for your participation in this public process. The Regional Planning Commission heard this testimony and will consider it. It will also be passed on to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR, and no further response is required.

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RPC-238	Public Services	Scarce County resources should not fund a new city in L.A. County where there is no existing infrastructure -- for example, no schools, parks, fire department, law enforcement -- especially in an area prone to wildfires. Our limited public resources should instead go toward equitable revitalization of existing communities in L.A. County, like where I live in District 1 -- South Los Angeles. We should not undermine the fiduciary duty and commitment we have already made to those shouldering the cost of crumbling infrastructure and the loss of affordable housing.	The Commenter's preference for revitalization of existing communities is noted, was heard by the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. With regard to Project independence and fiscal impacts on other communities, please see Response to Testimony RPC-167.
RPC-239	Miscellaneous	Also a recent New York Times expose stated that America is facing a crisis over its crumbling water infrastructure and fixing it will be a monumental and expensive task. Two powerful industries -- plastic and iron -- are locked in a lobbying war over the estimated 300 billion that local governments will spend on water and sewer pipes over the next decade. And that's just for the broken system, not for any new systems.	This testimony was heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. With regard to Project independence and fiscal impacts on other communities, please see Response to Testimony RPC-167. This testimony does not address the adequacy of the EIR, and no further response is required.
RPC-240	Miscellaneous	It is a battle of titans raging just inches beneath our feet. And somehow L.A., in its wisdom, is considering not fixing what's broken, but creating a profit for those Titans. Our funds should be about improving existing communities and building infrastructure; right? Squandering millions of our tax dollars in the creation and maintenance of a new city violates our public trust and possibly fiduciary duty, and it will create unintended consequences.	The Commenter's preference for revitalization of existing communities is noted, was heard by the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. With regard to Project independence and fiscal impacts on other communities, please see Response to Testimony RPC-167.

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RPC-241	Sprawl	Has California not learned its lesson about urban sprawl?	The Project does not constitute urban sprawl. Rather, the Project has been situated and designed to promote regional "smart growth" planning principles established by the Southern California Association of Governments (SCAG) 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy and the County's Antelope Valley Area Plan (AVAP) for the purpose of sustainably accommodating regional growth projections in a manner that reduces criteria air pollutant and greenhouse gas emissions and promotes public health while protecting regional open space, Sensitive Ecological Areas and agricultural areas consistent with the AVAP's Rural Preservation Strategy. For further discussion, please see the Final EIR, response to Comment F.8-20.
RPC-242	Public Services Utilities	We respectfully ask you not to approve entitlements for hedge fund managers and banks while we have crumbling infrastructures, schools, and water pipes, especially in places like Compton, where the water is brown and there aren't funds enough to build new sewage or water distribution pipes to clean the mess that has been made from neglect of our public leaders in the past. We could put more folks to work in the urban core if we funded these projects -- like those that live in Compton, Maywood and other regions that lack resources and capacity to figure out how to resolve their water issues.	The Commenter's preference for revitalization of existing communities is noted, was heard by the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. With regard to Project independence and fiscal impacts on other communities, please see Response to Testimony RPC-167.
RPC-243	Miscellaneous	Tejon's investors are trying to get the County leaders to give them entitlements for Centennial to financialize and profiteer the land assets. Why? So that they can then sell off to the highest bidder. The profits from Centennial will go to Tejon's Wall Street investors, not to our community. That money will leave our county to line the pockets of billionaires, and it's like we are subsidizing the creation of more wealth of the all ready too rich at the expense of the L.A. County taxpayer and the California taxpayer.	The Commenter's opposition is noted, was heard by the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. With regard to Project independence and fiscal impacts on other communities, please see Response to Testimony RPC-167. This testimony does not address the adequacy of the EIR, and no further response is required.

Testimony No.	Environmental Topic	Testimony	Response to Testimony
RPC-244	Traffic	Also, I don't want to be fooled or any of us to be fooled that highway 38 is an expansion and will exist regardless of whether this development is created. This development will create the demand for highway 138 at an expense of $830 million. This highway will only be in demand if this city is built. We already have over 60 crumbling roads and bridges that need repair in California to just waste on a new one we don't even need.	With regard to the relationship between the Project and the Northwest 138 Improvement Project, please see response to Comment ADD-F.10-5.
RPC-245	Conclusion	There is nothing sustainable about this Development. Tejon Centennial is not a solution for our regional housing shortage. Housing must be in close proximity to existing jobs and communities and under-utilized schools … -- and under-utilized schools, not something that's 65 miles north of our L.A. urban core. Thank you so much.	The Commenter's preference for an alternative location is noted, was heard by the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. The Project has been sited and designed to promote regional "smart growth" planning principles established by the Southern California Association of Governments (SCAG) 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy and the County's Antelope Valley Area Plan (AVAP) for the purpose of sustainably accommodating regional growth projections in a manner that reduces criteria air pollutant and greenhouse gas emissions and promotes public health while protecting regional open space, Sensitive Ecological Areas and agricultural areas consistent with the AVAP's Rural Preservation Strategy. For further discussion, please see the Final EIR, response to Comment F.8-20.
Suni Dodson			
RPC-246	Introduction	I'm Suni Dodson. I'm here representing the California (unintelligible) Society of Los Angeles, Santa Monica Chapter. And I'm also here as a private citizen. I think we have had many distinguished scientific speakers already commenting against this project. So I won't try to beat that to death. I think you know the issues.	Thank you for your participation in this public process. The Regional Planning Commission heard this testimony and will consider it. It will also be passed on to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR, and no further response is required.
RPC-247	Miscellaneous	I think, to me, there are many, many overriding considerations for you not to approve this project -- the lack of water, the harm to the ecology, the extremes of the environment where this development is proposed to be built. That's in the far western Mojave Desert. That is already not that	The EIR recognizes that the Project site sometimes experiences high wind events. (Draft EIR, pages 5.11-23, 5.3-17.) The Commenter's opinion that this will have a widespread effect on residents' behavior, and the Commenter's overall opposition to the Project, has been heard by the Regional Planning Commission and Board of Supervisors. This testimony does not address the adequacy of the EIR, and no further response is required.

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		bike-able, walkable community you're building there. Its hot and windy in the summer, cold and windy in the winter. So it's disingenuous to say you're building up a bike-able -- that everybody's going to be biking to school. That's just not possible.	
RPC-248	Miscellaneous	The lack of public transportation -- this is not the answer to Los Angeles County's housing shortage -- building a huge development out in the middle of nowhere. That -- who is going to pay for this to sustain this community? Yes. They'll build it. But then the taxpayer is going to be sit there with the bill to keep all of those -- all of that infrastructure running for the future.	With regard to transit connectivity, please see Response to Testimony RPC-126 With regard to the Project's independence and fiscal impact on other communities, please see Response to Testimony RPC-167.
RPC-249	Miscellaneous	Of course, it's going to destroy irreplaceable habitat. And the Greenhouse Zero -- Net-Zero thing, it's smoke and mirrors. You really have to closely examine all of that data -- re-examine it because you can say all you want that it's sustainable. It is not. Thank you very much.	The Commenter's opinion with regard to the Project's net zero commitments was heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. The County has thoroughly examined all available Project-related data relevant to the Project's sustainability. This testimony does not address the adequacy of the EIR, and no further response is required.
Hester Bell			
RPC-250	Introduction	Hello. My name is Hester Bell. I live in District 5 of Los Angeles County. And I would like to focus on two words -- "Regional Planning." You have enormous responsibilities here. And I can tell from the two projects you're reviewing today that you take your responsibilities very seriously. I'd like to contrast those two projects.	Thank you for your participation in this public process. The Regional Planning Commission heard this testimony and will consider it. It will also be passed on to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR, and no further response is required.
RPC-251	Miscellaneous	The West Carson Project is addressing and considering problems that exist in an existing community with providing transportation and housing near a major medical facility.	The Regional Planning Commission heard this testimony and will consider it. It will also be passed on to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR, and no further response is required.

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RPC-252	Miscellaneous	The Centennial Project is not addressing problems. It's creating problems. It is a boondoggle. Centennial is a Boondoggle, and it is going to create problems in -- with water usage, with air pollution, with transportation and transport of people and goods and services. And it, most particularly, is a boondoggle in terms of utilization resources. It's an extraordinarily poor way for Los Angeles County to use its important resources in providing for its citizens. And it will be a burden on Los Angeles County, not a benefit to Los Angeles County. Thank you.	The Commenter's opposition to the Project was heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. With regard to water supplies, please see Draft EIR, Section 5.18, Water Resources. With regard to air quality, please see Draft EIR, Section 5.11, Air Resources. With regard to traffic, please see Draft EIR, Section 5.10, Traffic, Access, and Circulation. With regard to the Project's independence and fiscal impact on other communities, please see Response to Testimony RPC-167.
Cliff McQueen			
RPC-253	Biology	Good afternoon. I'm Cliff McQueen. I'm a resident of District 1, and I am the President of the San Gabriel Mountains Chapter of the California Native Plant Society. And we in CNPS are concerned about the impacts of Centennial on the unique flora and fauna at the Centennial site.	Thank you for your participation in this public process. The Regional Planning Commission heard this testimony and will consider it. It will also be passed on to the Board of Supervisors for consideration. The Commenter's concerns are noted. This comment does not address the adequacy of the EIR, and no further response is required.
RPC-254	Biology	And you've heard all about the convergence of the ecosystems here. I won't go into that any further. But the corridors that are there for the wildlife are really important in Southern California. And we at CNPS want to preserve that as much as possible.	The Commenter's preference for preservation of the Project site is noted, was heard by the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. The EIR appropriately analyzes potential impacts to habitat connectivity, and the Project design and mitigation would ensure less than significant impacts. For further discussion, please see Response to Testimony RPC-133.
RPC-255	Housing	We know that the L.A. County population is growing and the additional people need housing somewhere. But we think that Centennial is the wrong place to build for all the reasons you've been hearing about.	The Commenter's opinion is noted, was heard by the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. The County notes that the Project has been situated and designed to promote regional "smart growth" planning principles established by the Southern California Association of Governments (SCAG) 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy and the County's Antelope Valley Area Plan (AVAP) for the purpose of sustainably accommodating regional growth projections in a manner that reduces criteria air pollutant and greenhouse gas emissions and promotes public health while protecting regional open space, Sensitive Ecological Areas and agricultural areas consistent with the AVAP's Rural Preservation

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			Strategy. For further discussion, please see the Final EIR, response to Comment F.8-20.
RPC-256	Greenhouse Gas	In addition to the environmental damage it would do, it would be a major setback for the significant progress that L.A. County has made and continues to make towards its goals towards reducing greenhouse gases and smog creating particulate matter in the air. And this is because of the six hundred -- up to 600 million vehicle miles every year that would be driven by commuters to other L.A. County communities.	The Commenter vastly overstates the estimated annual Project vehicle miles traveled ("VMT"). The Centennial Specific Plan Traffic Study includes both a regional VMT and trip length comparison (in 2035, a 1,921,599-mile net increase in VMT with the project, as opposed to without), and a Project VMT and trip length summary (3,724,006 total Project VMT, with average external trip length of 45.9 miles). (Draft EIR, Appendix 5.10-A, page 3.9.) The County also disagrees with the Commenter's characterization of the Project, and note that the Project has been situated and designed to promote regional "smart growth" planning principles established by the Southern California Association of Governments (SCAG) 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy and the County's Antelope Valley Area Plan (AVAP) for the purpose of sustainably accommodating regional growth projections in a manner that reduces criteria air pollutant and greenhouse gas emissions and promotes public health while protecting regional open space, Sensitive Ecological Areas and agricultural areas consistent with the AVAP's Rural Preservation Strategy. For further discussion, please see the Final EIR, response to Comment F.8-20.
RPC-257	Land Use	We believe there are better places to accommodate population growth than the Centennial proposed site, such as the one we heard about this morning, which is true infill.	The Commenter's opinion is noted, was heard by the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. The County notes that the Project has been situated and designed to promote regional "smart growth" planning principles established by the Southern California Association of Governments (SCAG) 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy and the County's Antelope Valley Area Plan (AVAP) for the purpose of sustainably accommodating regional growth projections in a manner that reduces criteria air pollutant and greenhouse gas emissions and promotes public health while protecting regional open space, Sensitive Ecological Areas and agricultural areas consistent with the AVAP's Rural Preservation Strategy. For further discussion, please see the Final EIR, response to Comment F.8-20.
RPC-258	Water Supply	I have another question or concern. I've heard questions about the adequacy of the water for the Centennial users. And we've heard that the aqueduct goes through the Tejon property and they have heritage water rights enough for the community and that they've been selling these rights to other communities. But what happens	This testimony suggesting that the occasional, temporary, and time-limited provision of certain of the water supplies secured by the Tejon Ranch Company (TRC) the Centennial Project (Project) for agricultural purposes in the San Joaquin Valley could adversely affect the short-term water users is inaccurate. As discussed on page 5.18-62 of the Project Environmental Impact Report (EIR), in 2008, the TRC acquired the rights to approximately 1,451 acre-feet per year (afy) of State Water Project (SWP) Table A Amounts

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		when this water is no longer available to the other communities because it's being used in Centennial? What will those people do that had been buying the water? I'm concerned that the County will be setting up for a future water crisis if Centennial is permitted to be built. I'd like to hear an answer to the question about that and who that water is going to now and what happens to those people when that water is being used by Centennial.	held by the Tulare Lake Basin Water Storage District (Tulare Lake). In 2010, TRC also acquired the rights to approximately 1,993 afy of SWP Table A Amounts held by the Dudley Ridge Water District (Dudley Ridge). The transfer agreements are included in Appendices L and K of Draft EIR Appendix 5.18-A. In 2012, TRC and AVEK executed an assignment and import agreement under which the Tulare Lake and Dudley Ridge Table A Amounts were transferred to AVEK in accordance with SWP system rules and regulations. AVEK agreed to import the supplies for Project use, subject to cost reimbursement and the provision of five percent of the imported amounts for agency use. The AVEK-TRC agreement is included in Appendix 5.18-E of the Draft EIR. Until required for Project use, subject to SWP system rules and regulations and the AVEK-TRC agreement, TRC has the right to contract with and make these supplies available to other users prior to Project approval and Project demand for these supplies. Since the Dudley Ridge and Tulare Lake water supplies were acquired, TRC has contracted to sell certain of the supplies on a temporary basis for San Joaquin Valley agricultural uses. The provision of any such water has been made subject to specific contract termination provisions and without any express or implied expectation that the supplies would be available after the applicable termination date. Agricultural demand for short-term, finite and temporally-limited water supplies from TRC is variable over time. The temporary, short-term provision of Dudley Ridge or Tulare Lake supplies acquired for Project use prior to Project approval and demand has no long-term effect on the sustainability of any agricultural operations in California. The water supplies, if purchased at all, at most provide a short-term water source that is not intended to and cannot in fact support long-term agricultural activities in the state due to the extremely limited duration of each supply contract and the state overwhelmingly more substantial agricultural water supply problems due to new laws and regulations. In 2014, the state enacted the Sustainable Groundwater Management Act (SGMA), which requires that almost all of the San Joaquin Valley (and other locations within the state) be managed to ensure that groundwater extractions avoid groundwater overdraft and other adverse results as defined in the statute (see California Water Code Sections 10720 *et seq.*). Where applicable, sustainable groundwater management plans must be adopted in 2020 or 2022. Recent published reports indicate that the San Joaquin Valley groundwater extraction deficit that SGMA must address

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			ranges from approximately 2 million afy[3330] to 3 million afy.[3331] Based on a 3 million afy groundwater deficit, as much as 1.2 million acres of California agriculture in the San Joaquin Valley is at risk of retirement and fallowing.[3332] The California Irrigation Institute is the oldest independent forum on irrigation and water in California. The primary purpose of the institute is to host an annual conference on California water issues, water use efficiency, water quality and surface and groundwater management. The conferences feature leading water industry experts, government agency heads, water district managers, innovative farmers and vendors with leading water saving products. The sessions aim to discuss research results and practical field experience. The 2017 annual conference included a panel discussion of the potential for decreased agricultural irrigated acreage as a result of SGMA and the concurrent lack of replacement water, including surface supplies that have been adversely affected by drought, and regulatory requirements and potentially decreased winter snowpack depths. One of the panelists summarized the effects of SGMA as follows: SGMA will have a dramatic effect on future land use decisions. There will be significant fallowing of agricultural land to achieve [the legislation's requirement of] "sustainable yield". Economics will dictate what remains in production. It is anticipated that larger, highly capitalized farming operations will purchase and fallow water right lands and accept this as a cost of doing business. Water will become very expensive and scarce. Water application will become extremely efficient. Larger vertically integrated operations will fund environmental water banks, whose role will be the acquisition of lands with water rights and fallow to enable the water bank depositor to keep their land base in production. Most likely we will see the reduction/loss of field crops and forages such as corn and alfalfa. High return on investment crops

[3330] See E. Hanak et al., Replenishing Groundwater in the San Joaquin Valley, Public Policy Institute of California, April 2018, http://www.ppic.org/wp-content/uploads/r-0417ehr.pdf, accessed July 2018.

[3331] See California Irrigation Institute, 2017 Conference, Session II, Implications of Decreased Agricultural Irrigated Acres, presentation on SGMA and California Dairy Industry- Final, January 30, 2017, http://www.caii.org/wp-content/uploads/2017/02/SGMA-and-California-Dairy-Industry-Final.pdf, accessed July 2018.

[3332] See E. Hanak et al., Replenishing Groundwater in the San Joaquin Valley, Public Policy Institute of California, April 2018, http://www.ppic.org/wp-content/uploads/r-0417ehr.pdf, accessed July 2018; California Irrigation Institute, 2017 Conference, Session II, Implications of Decreased Agricultural Irrigated Acres, presentation on SGMA and California Dairy Industry- Final, January 30, 2017, http://www.caii.org/wp-content/uploads/2017/02/SGMA-and-California-Dairy-Industry-Final.pdf, accessed July 2018.

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			such as grapes, almonds, pistachios and citrus will replace other field crops and forages.[3333] Consequently, California agricultural operators are currently facing significant and unprecedented potential water supply issues related to SGMA compliance alone that will likely affect hundreds of thousands of acres of farmland in the near future. TRC's provision of temporary, short-term water supplies that were specifically acquired and transferred to AVEK for Project use has no effect on the long-term sustainability and operation of agriculture within the state. As described in more detail in Section 5.18 of the Draft EIR, all of these supplies will be utilized by to meet Centennial demand after the Project is approved.
RPC-259	Development Agreement	I have one other warning here for a problem that has happened in many long-term development projects with environmental promises made in writing with good intentions is that very often, after a few years, there's nobody around who is there to check and make sure that the developer has done all the things that they planned to do and continues to do the maintenance that is required by their agreements. And who is it that's going to be there to ensure that those agreements are continued to be followed? And that's a major responsibility the County will have. And it's difficult to do. Thank you.	The Commenter's concern is noted, was heard by the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. Mitigation requirements imposed on the Project are laid out in the EIR and the Project's Mitigation Monitoring and Reporting Program, as are the ongoing monitoring and implementation responsibilities for all parties. See Final EIR, Appendix 2.0-C.Rev for more details. The Development Agreement also contains binding requirements and enforcement provisions.
Gabby McQueen			
RPC-260	Introduction	I'm Gabby McQueen. And I'm a resident of Los Angeles County, unincorporated area. And I'm also a CNPS member. But I also care for, not just habitat and beautiful flowers and all the benefits that nature provides us, but I care about the people that need the housing. And your job is to make sure that people get adequate housing.	The Regional Planning Commission heard this testimony and will consider it. It will also be passed on to the Board of Supervisors for consideration. The Project provides housing. This comment does not address the adequacy of the EIR, and no further response is required.

[3333] California Irrigation Institute, 2017 Conference, Session II, Implications of Decreased Agricultural Irrigated Acres, presentation on SGMA and California Dairy Industry-Final, pages 3-4, January 30, 2017, http://www.caii.org/wp-content/uploads/2017/02/SGMA-and-California-Dairy-Industry-Final.pdf, accessed July 2018.

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RPC-261	Geology Hazards	And what this project proposes is to put 60,000 people on top of earthquake faults in an area that has very high -- extremely high winds. And they will have fires because fires -- most fires come from human activity. And you put 60,000 people there, there are going to be fires, and they are going to be unstoppable. And like the other one -- other person mentioned -- the Valley Fever. So putting 60,000 people in those areas with those risks I don't think is a good idea. And for that alone, you -- I would advise you that you don't approve the project.	The Regional Planning Commission heard this testimony and will consider it. It will also be passed on to the Board of Supervisors for consideration. The Commenter's opposition to the Project is noted. With regard to fire hazard, please see Response to Testimony RPC-309. With regard to faults and seismic hazard, see Response to Testimony RPC-193. With regard to Valley Fever, please see Response to Testimony RPC-321.
RPC-262	Biology	On top of that, what you give up is just horrific. It's a beautiful environment that all Californians benefit from. To have open space, to have these wildflowers displayed, to have the biodiversity benefits all of the people, not just the investors.	The Regional Planning Commission heard this testimony and will consider it. It will also be passed on to the Board of Supervisors for consideration. The Commenter's opposition is noted. This comment does not address the adequacy of the EIR, and no further response is required.
RPC-263	Population/ Housing Traffic	So please, I would really love to see that you reject the Project and put your attention to providing housing where it is needed -- near jobs where there is no -- where there is already transportation and we don't have to create more impacts with creating more gas emission with all that traffic.	The Regional Planning Commission heard this testimony and will consider it. It will also be passed on to the Board of Supervisors for consideration. The Commenter's opposition is noted. The County notes that the Project has been situated and designed to promote regional "smart growth" planning principles established by the Southern California Association of Governments (SCAG) 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy and the County's Antelope Valley Area Plan (AVAP) for the purpose of sustainably accommodating regional growth projections in a manner that reduces criteria air pollutant and greenhouse gas emissions and promotes public health while protecting regional open space, Sensitive Ecological Areas and agricultural areas consistent with the AVAP's Rural Preservation Strategy. For further discussion, please see the Final EIR, response to Comment F.8-20. This comment does not address the adequacy of the EIR, and no further response is required.

Testimony No.	Environmental Topic	Testimony	Response to Testimony
RPC-264	Greenhouse Gas Traffic	That Zero-Gas emission to me does not make sense because I can't believe that they would have considered the traffic to and from jobs and housing that will ensue. If they make enough jobs for the housing in three years, what happens in those three years? People need to go to jobs and -- otherwise, they can't pay for the houses. And then you'll have a community that's dead. So – ... -- that's it.	Contrary to this comment's claim, the Project is not proposing a "Zero-Gas emissions" program. Rather, as part of the Project's proposed development agreement with the County, the Project has committed to achieving a "net zero carbon for the electric sector" standard on all public and private facilities constructed within the Project, which means that carbon emissions created to produce electricity that is consumed within the Specific Plan area will be offset with an equivalent amount of carbon emission reductions that result from quantified greenhouse gas emission reductions as documented over time as part of each application for a tentative tract map. With respect to the Project's projected jobs-housing balance, the Project's land use plan is projected to provide an estimated jobs/housing ratio of 1.22 through the development of commercial and business park uses on the site, thus positively contributing to the attainment of the AVAP's targeted jobs-to-housing ratio. As explained in Draft EIR Section 5.9.3 (pages 5.9-18 through 5.9-22, and 5.9-29 through 5.9-30), such Project-specific projections are based on regional employment growth projections published by the Southern California Association of Governments (SCAG), which SCAG adopted as part of its 2012 and 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) planning documents. This comment's assertion that people need jobs in order to pay for housing is noted, has been heard by the Regional Planning Commission, and will be provided to the Board of Supervisors for their consideration.
Kathy Metz			
RPC-265	General Opposition	Good afternoon. My name is Kathy Metz. I'll be short. I'm just here to say that I oppose the Centennial Project. And I really believe that we should protect this really vital and beautiful landscape and ecosystem. Thank you.	Thank you for your participation in this public process. The Commenter's opposition to the Project was heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR, and therefore no further response is required.
Roselyn Helfant			
RPC-266	Introduction	Hi. My name is Roselyn Helfant. I'm a resident of the Third District of L.A. County. I have a degree in environmental studies with an emphasis in environmental assessment. And I grew up in Simi	Thank you for your participation in this public process. The Regional Planning Commission heard this testimony and will consider it. It will also be passed on to the Board of Supervisors for consideration. The Commenter's opposition is noted. This comment does not address the adequacy of the EIR, and no further response is required.

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		Valley, California, where I had the opportunity to really see firsthand the effects of sprawl. I believe that this development is -- is beyond its capacity to be sustainable even with the mitigations and concessions made by the developer.	
RPC-267	Miscellaneous	In the last decade things have changed considerably in California. Our capacity to sustain this type of sprawl has been reduced in terms of ecosystem sustainability. We've had permanent heatwaves set in, together with severely decreasing water resources. And the fire threat has increased, as well as traffic has increased considerably in Los Angeles County to the breaking point. I don't think we have the capacity to support this development as a County, given the other strains -- these other strains on our resources.	The Commenter's opposition to the Project was heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. The County notes that the Project does not constitute sprawl. Rather, the Project has been situated and designed to promote regional "smart growth" planning principles established by the Southern California Association of Governments (SCAG) 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy and the County's Antelope Valley Area Plan (AVAP) for the purpose of sustainably accommodating regional growth projections in a manner that reduces criteria air pollutant and greenhouse gas emissions and promotes public health while protecting regional open space, Sensitive Ecological Areas and agricultural areas consistent with the AVAP's Rural Preservation Strategy. For further discussion, please see the Final EIR, response to Comment F.8-20.
RPC-268	Sprawl	Additionally, study after study has shown that the long-term costs of far-flung sprawl in these developments really take our public coffers to the breaking point as well. They become unmanageable for sewer systems, road systems, water systems, energy systems, fire suppression over the long term even with short-term concessions made by developers to help fund these costs.	The Project does not constitute sprawl. Rather, the Project has been situated and designed to promote regional "smart growth" planning principles established by the Southern California Association of Governments (SCAG) 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy and the County's Antelope Valley Area Plan (AVAP) for the purpose of sustainably accommodating regional growth projections in a manner that reduces criteria air pollutant and greenhouse gas emissions and promotes public health while protecting regional open space, Sensitive Ecological Areas and agricultural areas consistent with the AVAP's Rural Preservation Strategy. For further discussion, please see the Final EIR, response to Comment F.8-20. With regard to the Project's fiscal impact on surrounding communities, please see Response to Testimony RPC-167.
RPC-269	Miscellaneous	And they say that these cities can become independent. In fact, a lot of studies have shown that these places that seek to become independent, instead, have huge financial issues and are at risk of financial decay.	With regard to the Project's independence and fiscal impact on surrounding communities, please see Response to Testimony RPC-167.

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RPC-270	Infrastructure	So I think that we really need to ensure that our developments are next to current resources, current infrastructure. Other cities have also shown that the costs of developments to counties and cities when they are next to current structure -- infrastructure is much, much less than developments such as this.	The Commenter's preference for infill development was heard by the Regional Planning Commission and will be provided to the Board of Supervisors. The Project Applicant is responsible for infrastructure costs and construction, and the relative public cost of a Project is not an impact on the environment under CEQA. With regard to the Project's fiscal impact, please see Response to Testimony RPC-167. This testimony does not address the adequacy of the EIR, and no further response is required.
RPC-271	Climate Change	And also we're all concerned about climate change. And we want to make sure to reduce any increased impact on climate change. Thank you.	The Commenter's concerns with regard to climate change impacts were heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. The Project has been sited and designed to reduce GHG impacts, as further addressed in Response to Testimony RPC-268 and Final EIR, response to Comment F.8-20. Further, the EIR includes many mitigation measures which would reduce GHG emissions beyond those already inherent in the Project site and land use plans (e.g., balance mix of residential, employment, school, retail, parking and other uses; distributed village core areas with neighborhood serving uses and schools to encourage walking and biking; tertiary wastewater treatment and site-wide reuse of reclaimed water for outdoor irrigation, etc.), and project features included in the Specific Plan (e.g., comprehensive transportation management program to encourage multi-modal transportation and discourage single occupancy offsite automobile commute trips; Green Development Program). The list of mitigation measures in the EIR and the Mitigation Monitoring and Reporting Program (Final EIR, Appendix 2.0-C.Rev), go beyond the GHG reductions mandated by existing laws and regulations. See Final EIR, response to Comment F.8-204, for further details regarding GHG-reducing Project features, Specific Plan requirements, and mitigation measures.
Gavin Pierce			
RPC-272	Introduction	Hello. My name is Gavin Pierce. I'm a board member of the Highland Park Neighborhood Counsel and an Organizer with So. Cal. 350 Climate Action. I actually spent a month in the area on and surrounding Tejon Ranch one summer ago. And while I was there, I was amazed by the beauty of the land that could exist so close to such a massive urban center like our city. You forget that you're in	Thank you for your participation in this public process. The Regional Planning Commission heard this testimony and will consider it. It will also be passed on to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR, and no further response is required.

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		L.A. County. You take a step back into the way that the ground here was before we built upon it. That is to say that it's one of the last glimpses we have of the natural ecosystem of the region Angelenos call home. And we should cherish it.	
RPC-273	Biology	But it's more than about protecting what's beautiful. If we willing destroy the last remaining wild grasslands in California, with 99 percent of these habitats already erased, we will be forced to take a hard look at who we are as humans by eradicating this refuge -- 5,800 acres for plant and animal species such as bald eagles, mountain lions, and California condors.	Thank you for your participation in this public process. The Regional Planning Commission heard this testimony and will consider it. It will also be passed on to the Board of Supervisors for consideration. The Project does not eliminate the last remaining grasslands. For further discussion regarding grasslands preservation and mitigation, please see Response to Testimony RPC-323. This comment does not address the adequacy of the EIR, and no further response is required.
RPC-274	Traffic	Further, the proposed development would result in an additional 75,000 long distance drives per day on our already crowded freeways, jeopardizing city and state emission reduction goals.	Per the Centennial Specific Plan Traffic Study, the Project would result in approximately 75,908 external trips with an average trip length of 45.9 miles. (Draft EIR, Appendix 5.10-A, page 3.9.) However, this is based on traffic model output that does not reflect the many trip reduction measures to be implemented by the Project. (*Ibid.*) The Commenter's opinion that this jeopardizes Los Angeles and state emission reduction goals has been heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. However, the County disagrees with this assertion, noting that the Project has been sited and designed to meeting regional and state goals, including with regard to pollutant emissions and greenhouse gas emissions reductions. Please see Final EIR, response to Comment F.8-20 for more information.
RPC-275	Public Services Infrastructure	And, lastly, my opposition to Centennial is about more than the value of the life on the land there. It's also about the value of the lives of residents in L.A. County right here. The costs associated with this Project to fund new public services -- such as schools, fire departments, transit rails -- cannot be justified when there's an urgent need for funding elsewhere. We have a homeless crisis, we have drastically under-funded schools and we have infrastructure that needs support. There is work to do here in L.A. and surrounding cities -- very urgent work that needs to be resolved before we even	The Commenter's preference for revitalization of existing communities is noted, was heard by the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. With regard to Project independence and fiscal impacts on other communities, please see Response to Testimony RPC-167.

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		consider putting mounds of funding into new ventures.	
RPC-276	Conclusion	In closing, I would just like to thank the Board for hearing me, and I'd also like to urge you to reject this Project. Please think about the people. Please think about the climate goals of the city and state. And please think about the dire need to address current crises before we consider new and unnecessary expansions. Thank you.	The Commenter's opposition to the Project has been heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR, and therefore no further response is required.
Ankur Patel			
RPC-277	Introduction	My name is Ankur Patel. Who owns the world? Who owns the earth? No person, no Planning Commission. But you have an important say in how this important piece of land is used into the future. I apologize for my earlier editorial comments with respect to the Board. It is hot -- right? -- economically, politically, the atmosphere -- what is going on.	Thank you for your participation in this public process. The Regional Planning Commission heard this testimony and will consider it. It will also be passed on to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR, and no further response is required.
RPC-278	Population	And, again, what you decide here with these 20,000 units -- right? -- 60,000 people -- maybe more, maybe less, depending on if they're five bedroom or three bedroom -- $500,000 units or $1.5 million units. There's a whole range that hasn't been detailed out.	The Regional Planning Commission heard this testimony and will consider it. It will also be passed on to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR, and no further response is required.
RPC-279	Miscellaneous	The 20-year building plan, as Staff said, it's on their hypothesis. Right now they don't have the details on what CDEV, a Wall Street traded company, is going to design.	The Regional Planning Commission heard this testimony and will consider it. It will also be passed on to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR, and no further response is required.

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RPC-280	Miscellaneous	I appreciate my Commissioner, Mr. Modugno on behalf of Supervisor Kathryn Barger, clearly stating that this is going to be postponed because these details have not been discussed. The exhibits in process of preparation. There are so many details that my colleagues, my friends, other people have brought up. You cannot ignore -- you cannot ignore the range of testimony. And you cannot ignore their campaign contributions on this other side. I understand that. There's a political atmosphere that we're looking at. As appointed Commissioners, we represent voters. We represent people. We represent citizens who are here in good faith with public consciousness to preserve our land, our planet, and the species, and all these other things that are going on. That's why there are so many people in this room today. And you have the ability to charter a city -- a city; right? This is so dramatic -- potentially beautiful. But where is it -- why is it there?	The Regional Planning Commission heard this testimony and will consider it. It will also be passed on to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR, and no further response is required.
RPC-281	Public Services Traffic	We touched on education. And I'll give you one paramount example of Porter Ranch. The way that the phase developed and when schools are going to be lined in there -- again, the developer hasn't laid out three bedroom, four bedroom, five bedroom. How did that affect the population of the students. How many schools need to be built -- k through 12 -- over what period of time? Transportation is evolving. There's so many different details there. But this deserves more hearing.	With regard to the provision of school sites as part of the Project, the Project Applicant has consulted with applicable school districts concerning the numbers and location of school sites required for the expected Project residents. Draft EIR Section 4.0, Project Description, includes multiple school sites based on current student generation rates for residential households when the Draft EIR was prepared. The ultimate sizing of school sites would depend on further consultation with the school districts with regard to necessary inter-district transfers, the grade breakdown for students attending the schools, the implementation of school size reduction efforts, building layout and configuration needs, and the outdoor facility needs for each school. (Draft EIR, Section 5.15, Education, pages 5.15-17, -19.) The final designation of school sites for the Project will be completed with each future tract map, ensuring appropriate size and availability of schools to serve Project residents. (*Id*., page 5.15-18.)

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RPC-282	Miscellaneous	And, again, your -- I feel that you're listening to us. I appreciate it. I could spend my remaining 40 seconds addressing just the Commission, the audience, the few people who may be listening on public broadcast or however that is. But I know building houses is part of the solution. You have un-housed people; right? There's a homeless crisis. The framing of the conversation is so important. How does this development play in the broader aspects of humanity? We're voters. We're here to help bring the voice of the rational citizen. You know you can't approve this as it is. You're at the fulcrum of power and how this vote goes down and what that means for the future. My name is Ankur Patel. Thank you.	The Regional Planning Commission heard this testimony and will consider it. It will also be passed on to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR, and no further response is required.
J.P. Rose			
RPC-283	Introduction	Good afternoon, Commissioners. My name IS J.P. Rose. And I am an attorney with the Center for Biological Diversity and resident of the Third District. Approving Centennial would be a boon for Tejon's Wall Street investors, but it would be a bad deal for L.A. County. Tejon's mountain of studies, an army of consultants can't change the fact that Centennial would destroy thousands of acres of irreplaceable wildlands, nor can it change the reality that Centennial would add huge amounts of traffic to our already clogged freeways.	Thank you for your participation in this public process. The Commenter's opposition to the Project was heard in testimony by the Regional Planning Commission and considered and will be provided to the Board of Supervisors for consideration. The EIR thoroughly analyzes and discloses potential Project-related impacts with regard to biological resources (see Draft EIR, Section 5.7), land use (see Draft EIR, Section 5.8), and traffic (see Draft EIR, 5.10), and all feasible mitigation has been incorporated in each impact area, to ensure impacts are reduced to a less than significant level to the greatest extent feasible. This testimony does not specifically address the adequacy of the EIR, and no further response is required.
RPC-284	Housing	Tejon has spun Centennial as a solution to L.A.'s housing shortage. But building 60 miles from L.A. to solve L.A.'s housing shortage is like a doctor trying to cure a person with the flu by amputating her leg. The proposed solution does nothing to fix the problem and will actually make things worse.	The Commenter's opinion was heard by the Regional Planning Commission and will be provided to the Board of Supervisors. However, the County disagrees with the Commenter's characterization of the Project. The Project has been situated and designed to promote regional "smart growth" planning principles established by the Southern California Association of Governments (SCAG) 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy and the County's Antelope Valley Area Plan (AVAP) for the purpose of sustainably accommodating regional growth projections in a manner that reduces criteria air pollutant and greenhouse gas emissions and promotes public health while protecting regional open space, Sensitive

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			Ecological Areas and agricultural areas consistent with the AVAP's Rural Preservation Strategy. For further discussion, please see the Final EIR, response to Comment F.8-20.
RPC-285	Public Health	Studies show that long commutes increase the risk of diabetes, obesity, asthma, and depression. The truth is we need housing close to jobs here in the existing communities, not 60 miles from downtown L.A.	The Commenter's opinion was heard by the Regional Planning Commission and will be provided to the Board of Supervisors. However, the County disagrees with the Commenter's characterization of the Project. The Project has been situated and designed to promote regional smart growth principles and promote public health, as discussed further in Response to Testimony RPC-284. With regard to this comment's concerns regarding the health effects purportedly associated with driving, please see responses to Comments ADD-G.50-3 and ADD-G.50-4. This testimony does not address the adequacy of the EIR, and no further response is required.
RPC-286	Biology	Tejon will not pay for the damage caused by Centennial. No amount of money can bring back the wildflower fields, and no amount of money will bring back the San Joaquin kit fox and condor and other rare species that we evicted from their habitat.	The Commenter's opinion was heard by the Regional Planning Commission and will be provided to the Board of Supervisors. The County disagrees with the Commenter's characterization of the Project. After thorough and appropriate analysis, the EIR concludes that Project mitigation measures and the preservation of 14,908 acres of grasslands coupled with long-term management through implementation of the Ranchwide Management Plan will sufficiently offset and fully mitigate for impacts on wildflower fields associated with the Project. See Draft EIR, Section 5.7, Biological Resources, and Final EIR, responses to Comments B.4-17, B.4-43, F.3A-19, F.8-119, F.8-123 to F.8-125, and H.21-1 for further discussion of potential impacts to and mitigation to address such impacts to wildflower fields. With regard to San Joaquin kit fox, this species in not present on the Project site and the EIR therefore appropriately concludes that the Project site would have no impact on this species. See Draft EIR, Section 5.7, Biological Resources, for further information. With regard to California condor, the EIR appropriately concludes after thorough analysis that Project impacts would be less than significant, and mitigation requirements would further avoid impacts. For further discussion specific to California condor, see Draft EIR, Section 5.7, pages 5.7-94, -119, and -120 and Final EIR, responses to Comments B.4-20 to B.4-23, and F.8-138 to F.8-143.
RPC-287	Traffic	Nor is Tejon going to pay for the $830 million freeway that is necessary for it to go forward. Tejon's attorneys told you at the last hearing that the 138 is proceeding with or without Centennial. But Caltrans, in the MTA's own website, indicates that that is inaccurate. Instead, the six-lane freeway	The County acknowledges that per Caltrans, the Northwest 138 Improvement Project will be built in phases as needed or as demand requires, with short-term and mid-term improvements intended primarily to correct existing and potential safety conditions, including operational and safety improvements, such as intersection improvements, shoulder widening, and curve corrections. The corridor currently experiences accident rates double the statewide average, which alone necessitates significant

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		will only be built if demand requires. And the only demand up there next to the Angeles National Forest would be Centennial. We already have a $59 billion backlog of deferred road maintenance in California. And we just had our taxes increased through SB-1 to address that backlog. So why would we approve the creation of a new city that is entirely dependant on building a new billion dollar freeway.	improvements. The substantial majority of the regional employment, household and population supporting the need for the Northwest 138 Improvement Project are related to current and projected regional activities other than Centennial development. Regional transportation plans that were prepared well in advance of the Centennial plan have called for these significant improvements to the State Route (SR) 138 corridor. Consequently, significant portions of the approved Northwest 138 Improvement Project will be implemented irrespective of Centennial. If approved, Centennial will pay for SR-138 roadway improvements that are required to meet the incremental demand generated by the development. For further discussion with regard to the construction of the Northwest 138 Improvement Project in relation to the Centennial Project, please see response to Comment ADD-F.10-5.
RPC-288	Miscellaneous	Again, Centennial is a great deal for Tejon's Wall Street investors but a bad deal for L.A.	The Regional Planning Commission heard this testimony and will consider it. It will also be passed on to the Board of Supervisors for consideration. The Commenter's opposition is noted. This comment does not address the adequacy of the EIR, and no further response is required.
RPC-289	Ranch-Wide Agreement	Tejon continues to insinuate that other environmental groups have signed the Ranch-Wide Agreement in support of Centennial. But the Agreement says nothing of the kind. These groups only signed on to the Agreement and agreed not to oppose Centennial in exchange for Tejon agreeing not to develop portions of the ranch.	As noted by the Commenter, signatories to the 2008 Tejon Ranch Conservation and Land Use Agreement ("Ranchwide Agreement" or "RWA") agreed not to oppose four Tejon Ranch development projects, including the Centennial Project, after years of cooperative study and identification of the most appropriate respective locations for preservation and development. Per RWA recitals, "[t]he long-term conservation of Tejon Ranch has been one of the highest priorities" of the signatory organizations, and the agreement "follows many years of scientific analysis of conservation values on Tejon Ranch by TRC and others, including the Resource Organizations. By comprehensively addressing the entire Tejon Ranch, this Agreement avoids fragmentation of many of the environmentally sensitive areas of Tejon Ranch. The conserved lands will be managed in accordance with a comprehensive Ranch Wide Management Plan that will identify the natural resources and conservation values of the conserved lands as well as opportunities to protect, enhance and restore identified resources and values and establish best management practices for continued use of the conserved lands for existing ranch uses." (Final EIR, Appendix 4.7-E, page 2.)
RPC-290	Miscellaneous	Tejon also says that Centennial has been on the books for a very long time. That's true. It was conceived at a time when we did not fully appreciate the cost of such leap-frog development on people, environment, and budgets. But now we	The Commenter's opinion is noted for the record, has been heard by the Regional Planning Commission, and will be provided to the Board of Supervisors. However, the County disagrees. For an in-depth refutation of the assertion that the Project constitutes "leap-frog" or sprawl development, see Final EIR, response to Comment F.8-20.

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		do. And Centennial deserves to be in a museum as an excellent example of 20th century spot-style sprawl development.	
RPC-291	Conclusion	Californians are tired of leaders approving more sprawl at the expense of us, our children, and the environment. We're tired of watching California's landscapes and wildlife slip away under the guise of progress. And we're tired of past leaders putting people in harm's way by allowing large-scale development in areas known for extreme wildfire risk. The traffic we sit through and the smog we breathe every day is the legacy of past generations of leaders who have failed to the needs of people first. But you can do something historic and unprecedented. You can break that cycle and say no to Centennial. Thank you.	The Commenter's opposition to the Project is noted, was heard by the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. However, the County disagrees with the Commenter's assertions. Areas of potential impacts that the Commenter brings up have been thoroughly evaluated and mitigated to the extent feasible. For an in-depth refutation of the assertion that the Project constitutes sprawl, see Final EIR, response to Comment F.8-20. Land use is addressed in Draft EIR, Section 5.8, Land Use, Entitlements, and Planning; traffic impacts are addressed in Draft EIR, Section 5.10, Traffic, Access, and Circulation; wildfire risks are addressed in Draft EIR, Section 5.3, Hazards and Fire Safety; impacts to wildlife are addressed in Draft EIR, Section 5.7, Biological Resources. This testimony does not address the adequacy of the EIR, and no further response is necessary.
Tom Egan			
RPC-292	Introduction	Good afternoon, Commissioners and Staff. My name is Tom Egan. I'm the California Designated Representative for Defenders of Wildlife. Our members are dedicated to protecting wild animals and plants in the natural community. We employ science, participation, legislative advocacy, litigation, and on-the-ground solutions to impede the loss of biodiversity, habitat alteration, and wildlife loss. I'm a fourth-generation Californian. I've lived, worked, and played in the Western Mojave Desert for almost 30 years. I hold a Bachelor of science in wildlife management. And I have practiced as a professional wildlife biologist in both the public and private sectors for over 34 years.	Thank you for your participation in this public process. The Regional Planning Commission heard this testimony and will consider it. It will also be passed on to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR, and no further response is required.

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RPC-293	Biology	The Southern Tehachapi mountains, where Centennial would be situated, supports one of the highest areas of biodiversity in the entire Mojave Desert. Here the Tehachepi mountains converge with the coast ranges to the west, San Gabriel mountains to the south, and the Greater Mojave Desert to the west -- or east. It's one of the only places which links the deserts and mountains and the coast. It's part of California's gold. And it's remained relatively intact since Jedediah Smith and John C. Fremont trekked these lands marveling at grizzly bears, antelope, California condor and vast wildflower fields.	The Regional Planning Commission heard this testimony and will consider it. It will also be passed on to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR, and no further response is required.
RPC-294	Biology	I'm here today to voice our opposition to the Centennial Project. Our state has lost too much native wildlife habitat to ill-planned housing development and natural land alteration. Wildlife habitats and travel corridors will be lost as a result of this project. Make no mistake about it. Now, amidst the throes of climate change, these lands also represent, not only our link to the past, but our hope for the future. Now is not the time to sever critical wildlife habitat linkages by permitting massive housing developments like Centennial.	The Commenter's opposition to the Project was heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. However, the County disagrees with the Commenter's characterization of the Project. Project design and mitigation appropriately preserve areas for adequate wildlife movement, as further discussed in Response to Testimony RPC-133. This Project does not specifically address the adequacy of the EIR, and no further response is required.
RPC-295	Biology	This project will further endanger the California condor by impacting critical foraging habitat even though we've spent millions of dollars on the world's largest bird species. It cannot afford to lose any more habitat. Nor can the Tri-colored blackbird, recently listed by the State of California as a threatened species, which nests and forages in the Centennial Project area. This project will reduce our opportunities to recover these unique species. The white-tailed kite, Western burrowing owl and American badger would also lose ground they simply can't afford to lose.	The Commenter's opinions about impacts to California condor, tri-colored blackbird, white-tailed kite, Western burrowing owl and American badger are noted, have been heard by the Regional Planning Commission, and will be provided to the Board of Supervisors. However, the County disagrees and notes that after thorough and appropriate analysis, the EIR concludes that impacts to each of these species would be less than significant or less than significant with mitigation incorporated. For further discussion specific to California condor, see Draft EIR, Section 5.7, pages 5.7-94, -119, and -120 and Final EIR, responses to Comments B.4-20 to B.4-23, and F.8-138 to F.8-143. For further discussion specific to tri-colored blackbird, see Draft EIR, Section 5.7, pages 5.7-19, -22, -23, -91, -111 to -114, -145, -149 to 151, -154, -178, -179, Final EIR, responses to Comments B.4-18, B.4-19, F.3-14 to F.3-21, and F.8-155 to F.8-158. For further discussion specific to Western burrowing owl, see Draft EIR Section 5.7, pages 5.7-22, -92, -115, -150, -175, -176, Final

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			EIR, responses to Comments B.4-24, B.4-25, F.8-163 and F.8-164. For further discussion specific to white-tailed kite, see Draft EIR Section 5.7, pages 5.7-65, -94, -117, -118, -150, and Final EIR, response to Comment F.8-149. For further discussion specific to American badger, see Draft EIR, Section 5.7, pages 5.7-50, -51, -53, -54, -98, -126, -153, -175, and -176 and Final EIR, responses to Comments B.4-29 and F.8-159.
RPC-296	Biology	Not long ago early settlers arrived in nearby Antelope Valley, named for the massive herd of prong horn that roamed this landscape. By the 1930's the prong-horn joined the ranks of the grizzly bears and other species lost in this very special part of California. Now with the re-introduction and habitat protection, a small herd now calls the Tejon Ranch home.	The Commenter is correct that a herd of pronghorn resides in the Antelope Valley. The pronghorn is not on the CDFW list of Special Animals, and CDFW in fact occasionally issues permits for hunting of this herd, but the EIR specifically acknowledges that there is an interest in maintaining this herd. Draft EIR, pages 5.7-153; Final EIR, response to Comment B.4-35. The EIR therefore provides an appropriate impact analysis which is consistent with standard practices for sensitive species and the best available scientific information, including on-site observations, in suitable habitat areas. Pronghorn have reportedly been seen on rare occasions in random locations in the region but have been commonly observed and are known to primarily occupy the western portion of the site (upper Oso Canyon in particular), which is preserved mitigation open space and other locations along the foothills continuing to the northeast, which is also preserved mitigation open space. (Draft EIR, pages 5.7-128, 5.7-153) Since release of the Draft EIR, additional population distribution information has also been obtained from the Tejon Ranch Conservancy and is presented in the Final EIR (see Final EIR, Exhibit B.4-34, which indicates the primary usage area for pronghorn along the Tehachapi foothills, predominantly northeast of the Project site). As noted in the Final EIR, the Project's crossing opportunity under SR-138 connecting areas of appropriate habitat would serve the pronghorn. (Final EIR, response to Comment B.4-36) Further, the RWMP requires the Project Applicant to work with the Tejon Ranch Conservancy to identify and implement potential enhancement measures for pronghorn that are also supported by CDFW. (Final EIR, response to Comment B.4-35) For further discussion specific to pronghorn antelope, see Draft EIR, Section 5.7, pages 5.7-50, -54, -127, -128, and -153, and Final EIR, responses to Comments B.4-34 to B.4-37 and F.8-165 to F.8-168.
RPC-297	Conclusion	I urge you to make the only correct decision for the California condor, tri-colored blackbird, American badger, prong horn and a myriad of other species. These species have lost enough. Reject the Centennial Specific Plan.	The Commenter's opposition to the Project is noted, was heard by the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. With regard to the California condor, tri-colored blackbird, American badger, and pronghorn antelope, Project impacts on these species would be less than significant, and/or less than significant with mitigation incorporated. With regard to California condor, tri-colored blackbird, and American badger, see Response to Testimony RPC-

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		Thank you very much.	295. With regard to pronghorn antelope, see Response to Testimony RPC-296. This testimony does not specifically address the EIR, and no further response is required.
Ash Louf			
RPC-298	Introduction	Thank you, Commissioners. My name is Ash Louf. I'm the California Field Campaigner for the Center for Biological Diversity. We have tens of thousands of members here in L.A. County. And I urge you to reject this proposal. L.A. wants a livable future. And Centennial is the wrong future for L.A.	Thank you for your participation in this public process. The Regional Planning Commission heard this testimony and will consider it. It will also be passed on to the Board of Supervisors for consideration. The Commenter's opposition is noted. This comment does not address the adequacy of the EIR, and no further response is required.
RPC-299	Traffic Population/ Housing	The future of Los Angeles doesn't have to mean gridlock or polluted air. We could be an innovative leader in urban planning that protects our last wild spaces, while also reducing traffic and tailpipe emissions and prioritizes transit accessible affordable housing in places where people already live and work and where they need homes.	The Regional Planning Commission heard this testimony and will consider it. It will also be passed on to the Board of Supervisors for consideration. The Commenter's opposition is noted. The County disagrees with the Commenter's characterization of the Project, and notes that the Project has been sited and designed to promote regional "smart growth" planning principles established by the Southern California Association of Governments' (SCAG) 2016-2040 Regional Transportation Plan/ Sustainable Communities Strategy and the County's Antelope Valley Area Plan (AVAP) for the purpose of accommodating regional growth projections in a sustainable manner that reduces criteria air pollutant and greenhouse gas emissions and promotes public health while protecting regional open space, Sensitive Ecological Areas and agricultural areas consistent with the AVAP's Rural Preservation Strategy. See Final EIR, response to Comment F.8-20 for further discussion.
RPC-300	Miscellaneous	This is a project proposed by Wall-Street-backed mega-developers. This is a great deal for them. This is a bad deal for L.A. This project caters to Wall Street, not to L.A. residents.	The Regional Planning Commission heard this testimony and will consider it. It will also be passed on to the Board of Supervisors for consideration. The Commenter's opposition is noted. This comment does not address the adequacy of the EIR, and no further response is required.
RPC-301	Traffic Greenhouse Gas	Centennial is completely inconsistent with sustainable L.A. goals. Transportation emissions now are the greatest climate change driver in California. And this far-flung new city would generate 75,000 commutes and massive carbon pollution that undermines L.A. and California's climate goals. More pollution and sprawl	The Regional Planning Commission heard this testimony and will consider it. It will also be passed on to the Board of Supervisors for consideration. The Commenter's opposition is noted. The County disagrees with the Commenter's characterization of the Project, and notes that the Project has been sited and designed to promote regional "smart growth" planning principles established by the Southern California Association of Governments' (SCAG) 2016-2040 Regional Transportation Plan/Sustainable

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		development is unacceptable when our region is already out of compliances with existing air quality standards.	Communities Strategy and the County's Antelope Valley Area Plan (AVAP) for the purpose of accommodating regional growth projections in a sustainable manner that reduces criteria air pollutant and greenhouse gas emissions and promotes public health while protecting regional open space, Sensitive Ecological Areas and agricultural areas consistent with the AVAP's Rural Preservation Strategy. See Final EIR, response to Comment F.8-20 for further discussion.
RPC-302	Affordable Housing	The County should also focus on permitting developments that increase L.A. County's sustainability and affordable housing -- and affordable housing to improve residents' quality of life while protecting the planet. L.A. needs smart urban planning. It needs housing that is affordable and is close to existing job centers, near public transit. Building housing without planning for workers and families quality of life is short-sighted and flawed. In order to provide Californians with long-term stable affordable housing, we need to adopt policy and build housing that addresses displacement, access, sustainability, and climate change.	The Regional Planning Commission heard this testimony and will consider it. It will also be passed on to the Board of Supervisors for consideration. The Commenter's opposition is noted. The County disagrees with the Commenter's characterization of the Project, and notes that the Project has been sited and designed to promote regional "smart growth" planning principles established by the Southern California Association of Governments' (SCAG) 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy and the County's Antelope Valley Area Plan (AVAP) for the purpose of accommodating regional growth projections in a sustainable manner that reduces criteria air pollutant and greenhouse gas emissions and promotes public health while protecting regional open space, Sensitive Ecological Areas and agricultural areas consistent with the AVAP's Rural Preservation Strategy. See Final EIR, response to Comment F.8-20 for further discussion.
RPC-303	Conclusion	Because Centennial's proposal does not fit the needs of a smart and visionary future for L.A. County residents, the Planning Commission should reject this project. Thank you.	The Regional Planning Commission heard this testimony and will consider it. The Commenter's opposition is noted. It will also be passed on to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR, and no further response is required.
Chris Hanson			
RPC-304	General Opposition	I'm Chris Hanson. I come to you today as a performance artist performing mainly in Santa Monica. And my background is as a sociologist at U.C. Riverside. I want to remind us that this is not something we can really take back. And when I interact with so many tourists who visit Santa Monica, I learn that they come here for our art. And a lot of our art is	The Regional Planning Commission heard this testimony and will consider it. It will also be passed on to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR, and no further response is required.

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		painted in murals and sculptures. But I learned a lot of the other art is in our wildlife. And Centennial is one of the last remaining pieces of wildlife that we have to offer in Southern California outside of Yosemite and the Sequoias. And we don't really get to rebuild that once we kind of destroy it, which is what we would do essentially through this development. Yeah. So I just wanted to remind you of that. That's it. Thank you.	
Leslie Percell			
RPC-305	Introduction	Hi. My name is Leslie Percell. I have lived in Los Angeles, but I am now living in Ventura. And I would like to say I am affiliated with the California Native Plant Society, Channel Islands Chapter, which includes Santa Barbara and Ventura. And there are some possible impacts to Ventura County from this proposed project in terms of air quality, traffic, and possibly even water.	Thank you for your participation in this public process. The Project EIR appropriately addresses potential Project-related impacts in Ventura County. For example, the EIR's traffic analysis includes an assessment of Project traffic impacts within Ventura County, particularly traveling westbound on State Route 126, as shown Draft EIR Exhibit 5.10-7 and Tables 5.10-2, 5.10-3, 5.10-4, 5.10-5, 5.10-6, 5.10-21, 5.10-22, 5.10-23, 5.10-25, 5.10-26, 5.10-27, 5.10-28, 5.10-24. And Final EIR Appendix 5.11-E includes a supplemental air quality analysis that specifically analyzes the Project's potential air quality impacts within the jurisdiction of the Ventura County Air Pollution Control District. In both cases, the EIR determined that related impacts would be less than significant. See also Final EIR, response to Comment F.8-195, which discusses the Project's potential air quality impacts in Ventura County. There is no evidence that the Project will have a significant adverse effect on water supplies in Ventura County. This testimony does not address the adequacy of the EIR, and no further response is required.
RPC-306	Land Use	I would like to just say at the outset that I think it's incumbent on this planning body to consider developing in more appropriate areas and in this regard to say that there are lands that are already disturbed in the Antelope Valley. I drove back from the Lancaster hearing along the 138. And I got to see "For Sale" signs on either side of the highway. I think these were previous agricultural lands or grazing lands. I don't know. But there's a lot of land with already disturbed soils	The Commenter's preference for development in alternative locations is noted, was heard by the Regional Planning Commissioners, and will be provided to the Board of Supervisors for consideration. This testimony does not specifically address the adequacy of the EIR, and no further response is required. Nonetheless, the County notes that the Project has been sited and designed to promote regional "smart growth" planning principles established by the Southern California Association of Governments' (SCAG) 2016-2040 Regional Transportation Plan/ Sustainable Communities Strategy and the County's Antelope Valley Area Plan (AVAP) for the purpose of accommodating regional growth projections in a sustainable manner that

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		that could be used and would be much closer to Lancaster and other developed areas.	reduces criteria air pollutant and greenhouse gas emissions and promotes public health while protecting regional open space, Sensitive Ecological Areas and agricultural areas consistent with the AVAP's Rural Preservation Strategy. See Final EIR, response to Comment F.8-20 for further discussion.
RPC-307	Soils	I would think that it's important to think about this in terms of carbon sequestration in the soil and in natural soils particularly. The State is developing a plan right now for the natural and working lands in terms of how much carbon is sequestered in those kinds of soils. So I think that they're promoting keeping the soil sequestration instead of building on it and developing it.	As this comment correctly notes, the Project would result in the conversion of some vegetative cover that currently sequesters carbon, as disclosed and analyzed in Draft EIR Section 5.21, Climate Change (pages 5.21-5, -50). It should be noted, however, that the Project would plant an estimated 35,123 new trees, as required by the County Tree Planting Ordinance, which would result in an estimated long-term sequestration of 24,867 metric tons of carbon dioxide equivalent, as discussed on Draft EIR page 5.21-83.
RPC-308	Geology Hazards	There are a number of things I was concerned about. I read quickly through some of the documents. A huge amount of blasting and earth moving in terms of this area, which has already seismic instability. And it said there were potential offsite landslide lateral spreading subsidence and liquefaction or collapse. There's a very high fire hazard zone here. Some of it is only medium, but much of it is high and very high. And the document said that there is inadequate access to water and water pressure to fight these fires.	The Commenter's characterization of Project-related impacts is incomplete. With regard to seismic impacts, the risk of both primary (i.e., surface rupture and ground shaking) and secondary (e.g., liquefaction, landslides) seismic risks are fully disclosed and analyzed in Section 5.1 of the Draft EIR, and the EIR concludes after thorough analysis that by implementing expert recommendations and complying with State and County requirements, impacts would be reduced to a less than significant level, including with regard to landslides, lateral spreading, subsidence, liquefaction, and collapse. For further information, see Draft EIR, Section 5.1, Final EIR, responses to Comments F.8-206 through F.8-211, and Response to Testimony RPC-193. Fire hazards and mitigation to reduce impacts to a less than significant level are also thoroughly and appropriately analyzed in the EIR consistent with CEQA requirements, as further discussed in Response to Testimony RPC-309. With regard to access to water and water pressure to fight potential fires, the Draft EIR concludes that prior to Project construction and mitigation, there would be inadequate access, but these access issues would be addressed as the Project site is developed. (Draft EIR, Section 5.2, Hydrology and Flood, page 5.2-35.) For further discussion of access to water and water pressure, please see Final EIR, response to Comment G.28-4.
RPC-309	Hazards	I was in Ventura -- and I'm sorry if I'm emotional. But it was very, very intense and scary to be there for those two weeks of fire nonstop. And I know people that lost their homes. I did not. But the cumulative impact on the whole community up and down the coast and inland was huge. And this is not to be taken lightly because building in these kinds	With regard to fire, the EIR appropriately evaluates the Project's potential fire safety impacts under two thresholds of significance. First, the Draft EIR considers whether the Project would expose people or structures to a significant risk of loss, injury or death involving fires because it is located (i) within a Very High Fire Hazard Severity Zone (VHFHSZ), (ii) within a high fire hazard area with inadequate access, (iii) within an area with inadequate water and pressure to meet fire flow standards, or (iv) within proximity to land uses that have the potential for dangerous fire hazard. Second, the Draft

Testimony No.	Environmental Topic	Testimony	Response to Testimony
		of zones, where you increase what's called the urban wildland interface, creates a huge amount more hazard.	EIR considers whether the Project constitutes a potentially dangerous fire hazard. The Draft EIR determined that, with implementation of MM 3-9, Project impacts related to fire hazards would be less than significant under both applicable thresholds of significance. The Draft EIR concluded that Project impacts related to fire safety would be less than significant only after taking into consideration (i) Project site access, (ii) Project site water flows, (iii) Project site topography, (iv) Project site vegetative cover, (v) existing and proposed regulatory controls, (vi) existing mutual aid agreements between federal, state, and local fire safety service providers, and (vii) Project improvements and mitigation measures related to landscaping and vegetation management, building construction, circulation, public utilities, and fire protection services, including but not limited to MM 3-9. This testimony does not specifically address the adequacy of the EIR, and no further response is required. For further discussion of fire impacts, see Draft EIR, Section 5.3, and Final EIR, response to Comment A.2-6.
RPC-310	Biology	Let's see. I'd like to also mention that the document seems to confuse native versus drought-tolerant. We're using them interchangeably. And I would like to have that noted -- that natives are native. And drought-tolerant can be from any other part of the country or world.	The Commenter's opinion regarding confusion between native and drought tolerant plants is noted, was heard in testimony by the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. However, the Commenter is incorrect. The Centennial Specific Plan's plant palette requires that landscaping for the Project use plants that are on the approved list because they are *both* an approved native or adapted species *and* drought tolerant. Please see Final EIR Appendix 4.0-A.Rev, Section 3.4, and specifically the plant palette at subsection 3.4.3, for more details. The EIR also acknowledges that the two are different, discussing reasons for including native and adapted plant species (Draft EIR, Section 5.7, page 5.7-167, -190) and drought tolerant plants (Draft EIR, Section 5.3, Hazards and Fire Safety, page 5.3-37) separately with regard to the Project's plant palette.
RPC-311	Cultural	One more item, please, I did need to mention -- cultural resources. There's a lot of sites that need to be protected in situ rather than excavated if any of this Development goes forward.	The Commenter's preference for in-situ preservation is noted, was heard in testimony by the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. The Project's potential impacts to cultural resources are assessed in Draft EIR Section 5.6, Cultural and Tribal Resources. The EIR identifies a suite of mitigation measures that are consistent with the requirements of Public Resources Code Section 21083.2 and would ensure that the Project's potential impact on cultural resources would be mitigated to a less than significant level. Per Assembly Bill 52 requirements, consultation with appropriate Native American Tribes was completed for the Project, and mitigation measures were agreed upon as appropriate by all parties involved. Per the request of the Tejon Tribe, key mitigation measure requirements include the employment of Native

Testimony No.	Environmental Topic	Testimony	Response to Testimony
			American monitors during ground disturbing activities, as well as the permanent curation of any prehistoric artifacts and/or Tribal Cultural Resources discovered during construction of the Project. For further discussion, see Draft EIR, Section 5.6, and Final EIR, response to Comment A.2-9, and MMs 6-1 through 6-10 in Final EIR Appendix 2.0-C.Rev, pages C-13 through C-26.
RPC-312	Specific Plan	And also there was a section where they talked about later on in terms of ministerial versus discretionary review. And it says in this document that they actually – ... So there could be zoning changes according to this document, with only ministerial review, which means no public notice, no hearing, no appeal.	The Commenter is incorrect about zone changes. Section 4.5 of the Centennial Specific Plan lists actions subject to ministerial review under the Specific Plan, which does not include zone changes. See Final EIR Appendix 4.0-A.Rev at Section 4.5 for further details.
Sandra Hernandez			
RPC-313	Support	Sandra Hernandez. Hello. How do you do? My name is Sandra Hernandez. I live in Bakersfield. I'm from the Tejon Indian Tribe. I'm the treasurer for the Tejon Indian Tribe and assist with the Tribe's cultural reclamation and revitalization work. The Tejon Indian Tribe is a sovereign native nation and the only federally recognized tribe within Kern County. I'm here today to give the tribe support for CENTENNIAL community. Tejon Ranch and the Tejon Indian Tribe have a joint interest in the preservation of the historical and culturally significant lands and artifacts. Together the Ranch and Tribe have maintained significant communication towards the ongoing refinement to culturally-related work and processes. Our shared -- excuse me -- our shared investment in Tejon land and its heritage resources continues to strengthen and bridge Tejon Ranch and the Tejon Indian Tribe's relationship.	Thank you for your participation in this public process. The Commenter's support for the Project has been heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. For information regarding AB 52 consultation with Native American tribes, please see Draft EIR, Section 5.6, Cultural and Tribal Resources. This comment does not address the adequacy of the EIR, and therefore no further response is required.

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		The Tribe maintains offices within Bakersfield to provide social services to our tribal members. Within this tribal office, we maintain a federally compliant repository where we house heritage resources and also curate federal collections. The Tribe owns an old school building. This is -- ironically, some of our oldest tribal members attended this old school that we purchased and are now rehabilitating. This building is approximately 25 minutes from our current tribal offices and is to be rehabilitated to serve in part as the community center with devoted space to display the Tribe's history and cultural artifacts. Tejon Ranch and the Tejon Indian Tribe work hard together to guarantee that the historic and cultural contributions of our ancestors -- the people of Tejon -- remain respected, protected, and accessible for cultural and educational opportunities for the entire community. The Tribe supports Centennial, and we lend our support today. Thank you all for your time.	
Bryn Linblan			
RPC-314	Introduction	Hi. Good afternoon. My name is Bryn Linblan, Associate Director of Climate Resolve, a local org. focused on climate change solutions. I want to highlight a few issues that were insufficiently addressed in the Applicant's response materials that were submitted for this hearing and therefore not deserving of your approval. And I'm going to focus on the transportation impacts of this sprawl, talk about the Development Project and some of the unreasonable and unsubstantiated assumptions that were included in	Thank you for your participation in this public process. The Commenter's opposition to the Project was heard in testimony by the Regional Planning Commission and considered and will be provided to the Board of Supervisors for consideration. For an in-depth refutation of the assertion that the Project constitutes sprawl, please see Final EIR, response to Comment F.8-20. With regard to remaining issues raised by the Commenter, please see Responses to Testimony RPC-320 through RPC-324.

Testimony No.	Environmental Topic	Testimony	Response to Testimony
		the Applicant's Response as well as the misuse of Net-Zero concept.	
RPC-315	Pop/Housing	So starting jobs/housing balance. You've had a number of people pointing out to you that it's not realistic to achieve a balance of jobs and housing in this growth -- this Development Project. Right now, in North L.A. County, we're seeing about two times the development of housing as we are jobs. And I think the hypothetical projections that were presented to you in the phasing response just really doesn't alleviate any doubts that I have about that balance being achieved. I don't think there's any sort of assurances or mechanisms to make that balance growth happen.	This comment's skepticism regarding the Project's projected jobs/housing ratio is noted, was heard by the Regional Planning Commission, and will be provided to the Board of Supervisors for their consideration. The Project's land use plan is projected to provide an estimated jobs/housing ratio of 1.22 through the development of commercial and business park uses on the site, thus positively contributing to the attainment of the AVAP's targeted jobs-to-housing ratio. As explained in Draft EIR Section 5.9.3 (pages 5.9-18 to -22, and pages 5.9-29, -30), such Project-specific projections are based on regional employment growth projections published by the Southern California Association of Governments (SCAG), which SCAG adopted as part of its 2012 and 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) planning documents.
RPC-316	Greenhouse Gas	Second, the E.V. assumptions that were in the Response given to you today claim there would be 50 percent E.V. utilization at project buildout. But compare that to current market share, which is 4 1/2 percent. And the project doesn't have any sort of incentives such as the Newhall Ranch project does have incentives to try to bring about that E.V. adoption. This project doesn't. So that 50 percent assumption, I think, is unfounded.	The Commenter's opinion with regard to whether electric vehicle use is realistic has been heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. However, the County disagrees and notes that EIR assumptions are appropriately supported. The Commenter provides no evidence for its assertion. Conversely, Attachment G – GHG Reduction Memo, to the July 11, 2018 Regional Planning Commission Public Hearing Staff Report ("GHG Memo")[3334] clearly explains its assumed increase in EV adoption rate from current 4 percent to 50 percent at the time of Project buildout. The current CalEEMod default value for EV use is approximately 4 percent of all vehicles, which does not reflect reasonably foreseeable future EV adoption rates based on ongoing public and private sector efforts to develop and deploy EV technologies and products.[3335] As discussed further in the GHG Memo, global projections in a Bloomberg New Energy Finance report indicate that by 2040, 55 percent of new car sales will be electric, and a University of California, Berkeley report estimates achieving up to 46 percent market share for EVs nationally by 2030. (GHG

[3334] Memorandum from Tin Cheung and Kristin Starbird of Psomas to Jennifer Hernandez of Holland & Knight, re Updated Greenhouse Gas Calculations for the Centennial Specific Plan, dated Juny 27, 2018, available at: http://planning.lacounty.gov/assets/upl/case/sp_02-232_pm060022-20180711-attG5.pdf.

[3335] See, e.g., CARB's 2018 Annual Evaluation of Fuel Cell Electric Vehicle Deployment & Hydrogen Fuel Station Network Development, available at: https://www.arb.ca.gov/msprog/zevprog/ab8/ab8_report_2018_print.pdf. As noted in this report, in just the 12 months of 2017, there was a significant shift in momentum of California's hydrogen fueling station network development and Fuel Cell Electric Vehicle (FCEV) development and deployment. Per Executive Order B-48-18, there is a target of 5 million ZEVs by 2030, and FCEVs are expected to comprise a significant portion of this future fleet. The California Fuel Cell Partnership anticipates 1 million FCEVs on the road by 2030.

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			Memo, page 4). An International Monetary Fund working paper indicates that the share of EVs in national vehicle stock would be 30 percent by 2027, and by 2042 this would be over 90 percent. (*Ibid.*) Although these projections vary, they all point toward a much higher level of EV sales and adoption in the country in the near future. See GHG Memo, pages 4-5, for further discussion.
RPC-317	Transit	Third, the TMA that is part of the project -- it said it will offer linkages to some of the job centers -- Santa Clarita, Palmdale, the Grapevine -- but doesn't offer a connection to Los Angeles. And so I think there's -- you're presented with the rail connectivity and that that wasn't feasible. But I think there's still a lot of room to see more specificity on other types of transit connection to L.A. jobs.	With regard to transit connectivity, please see Response to Testimony RPC-126.
RPC-318	Greenhouse Gas	And last -- the concept of Net-Zero -- I was reading a response -- I think he kind of presented the concept as we could be doing this much harm. We're going to not do this. And that -- the harm that we're not doing is larger than the harm we are doing. So they're calling that Net-Zero. I think that that's what's not a correct use of the concept because there still is that harm. So I think there's still a lot of room they could do to be calling themselves Net-Zero such as the Newhall project.	As part of the Project's proposed development agreement with the County, the Project has committed to achieving a "net zero carbon for the electric sector" standard on all public and private facilities constructed within the Project, which means that carbon emissions created to produce electricity that is consumed within the Specific Plan area will be offset with an equivalent amount of carbon emission reductions that result from quantified greenhouse gas emission reductions as documented over time as part of each application for a tentative tract map. This comment's reference to the Newhall Ranch project that has committed to a goal of zero net GHG emissions (as opposed to the Project's proposed "net zero carbon for the electric sector") is noted. CEQA does not require projects to reduce onsite GHG emissions to the greatest extent practicable, nor does it require the EIR to provide substantial evidence demonstrating that GHG reductions needed to achieve zero net energy are infeasible. Courts have consistently held that single projects cannot be required to bear a greater than proportional share of mitigating a cumulative significant impact.[3336,3337,3338] This limitation is also expressly stated in CEQA Guidelines §§ 15041(a), 15126.4(a)(4). Within this

[3336] *Dolan v. City of Tigard* (1994) 512 U.S. 374
[3337] *Nollan v. Cal. Coastal Comm.* (1987) 483 U.S. 825, 835 n. 4
[3338] Ehrlich v. City of Culver City (1996) 12 Cal. 4th 854

Testimony No.	Environmental Topic	Testimony	Response to Testimony
			cumulative impact mitigation measure framework, all feasible mitigation measures to reduce the Project's GHG emissions impacts have been required and are described in Draft EIR Section 5.21, Climate Change.
RPC-319	Conclusion	Really I think, fundamentally, this is sort of a square peg project trying to fit in a round hole. It's not the type of development that our region needs to make good on its climate change goals and solve our transportation issues. So, lastly, at the last hearing, Commissioner Modugno, I heard you describing your role as that this project is going to move forward in some form or another, and it's just what that form looks like. And I just encourage you to call question to that premise -- whether this project really needs to move forward at all. Thank you.	The Commenter's opposition to the Project has been heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. The County disagrees with the Commenter's characterization of the Project. The Project has been sited and designed to promote regional "smart growth" planning principles established by the Southern California Association of Governments' (SCAG) 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy and the County's Antelope Valley Area Plan (AVAP) for the purpose of accommodating regional growth projections in a sustainable manner that reduces criteria air pollutant and greenhouse gas emissions and promotes public health while protecting regional open space, Sensitive Ecological Areas and agricultural areas consistent with the AVAP's Rural Preservation Strategy. See Final EIR, response to Comment F.8-20 for further discussion.
Orchid Black			
RPC-320	Introduction	My name is Orchid Black. Mr. Louie, Mr. Moon, Commissioners, thank you for allowing me to speak today. I want to state that many projects -- bad projects are approved on overriding considerations -- jobs, housing. This project needs to be disapproved -- not approved -- because there are so many overriding considerations not to do it.	Thank you for your participation in this public process. The Commenter's opposition to the Project has been heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR, and therefore no further response is required.
RPC-321	Public Health	We've heard most of them today -- public health, the high heat issue. And public health is not just Valley Fever, but all the other issues brought up. The crazy transportation, lack of connectivity.	With regard to transit connectivity, please see Response to Testimony RPC-126. With regard to rising Project site temperatures, please see Response to Testimony RPC-207. With regard to Valley Fever, the EIR appropriately analyzes and discloses potential Project impacts related to Valley Fever, including with regard to the nature of the condition, potential for Valley Fever spores to be found in soils in the Antelope Valley, the effects of contracting Valley Fever, and risks from possible exposure to both construction workers and Project residents. See Draft EIR, Section 5.3, Hazards and Fire Safety, pages 5.3-13 to -14 and 5.3-17 to-19, Section 5.11, Air Resources, pages 5.11-28 through -29, and -64 through -67; Final EIR,

Testimony No.	Environmental Topic	Testimony	Response to Testimony
			responses to Comment F.3-29 through F.3-32, F.3A-5, F.3A-38 through F.3A-45, F.3A-68, F.3A-69, and G.13-1. Implementation of fugitive dust control measures required by AVAQMD and SCAQMD and MMs 3-2 and 3-3 would mitigate impacts related to Valley Fever to be less than significant. See also see response to Comment ADD-F.13-10, which further revises valley fever mitigation.
RPC-322	Infrastructure	The urban core subsidizing the fringe development. That's one that really was only elucidated today -- that no matter what they build, citizens of L.A. County will have to pay for the maintenance. And there's $88 billion needed to update our sewer system right now. And it will be millions and millions for all the cities that exist. And -- but I don't see us attaching millions to Centennial. So -- and that's from the San Gabriel Valley Tribune.	With regard to the Project's independence and fiscal impacts on surrounding communities, please see Response to Testimony RPC-167.
RPC-323	Biology	The environmental concerns are huge. We've lost most of the species that exist on grasslands now. Why? Because we've lost most of the grassland. We will have lost all of the grassland if this Project is approved. So that's a huge overriding consideration -- the last grassland.	The Commenter's assertion that all grassland will have been lost if the Project is approved is incorrect. Draft EIR Section 5.7, Biological Resources, discloses the Project's potential impact to grasslands and determines that direct and indirect impacts would be mitigated to a less than significant level, but cumulative impacts to native grasslands would be a cumulative significant impact. (Draft EIR, pages 5.7-158, -162.) Project implementation would include mitigation at a ratio of at least 2:1 for grasslands, resulting in improved functions and values of grasslands on the Project site, in addition to preservation in perpetuity within the 39,000-acre Centennial Mitigation Preserve as described in PDF 7-1 on page 5.7-135 of the Draft EIR. Intensive, multi-year grassland studies have revealed that grasslands of equal or greater value occur in vast quantities in the Mitigation Preserve. Please see Final EIR, responses to Comments B.4-17, B.4-43, B.4-63, F.7-22, F.8-124, F.8-125, F.8-127, F.8-128, and F.8-131 for further discussion of grasslands.

Testimony No.	Environmental Topic	Testimony	Response to Testimony
RPC-324	Traffic	And 27 million car trips per year. Everybody's using this small number. But that's the daily number -- 27,375,000. And that's the proponents' numbers. Other people can come up with better numbers.	As explained in Draft EIR Section 5.10, Traffic and Circulation, the North County Sub-Area Model provides an estimate of the Project's average daily trips. As shown on Draft EIR Table 5.10-19, the model projects that about 70,246 of the Project's average daily trips (i.e., 48 percent) will be internal to the Project site, while about 75,908 average daily trips (i.e., 52 percent) will be external to the Project site. Based on these numbers, and as this comment correctly notes, the Project would generate approximately 27.4 million average external trips on an annual basis. This comment's speculation that "other people can come up with better numbers" is noted, has been heard by the Regional Planning Commission, and will be provided to the Board of Supervisors for their consideration.
RPC-325	Land Use	The West Carson Plan has 2,000 homes plus commercial and 247 acres, if you take out the hospital. Centennial, which was called well designed, the best design ever and infill -- which it isn't -- has 10 times the residences and commercial in 20 times the space. That's not good planning.	The Commenter's opinion that the Project does not constitute prudent planning was heard in testimony by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. The County disagrees, and notes that the EIR does not indicate the Project is infill. Rather, the EIR specifically recognizes that while the Project is not infill, it has been situated and designed to promote "smart growth" planning principles established by SCAG's 2016 RTP/SCS and the County's AVAP for the purpose of sustainably accommodating regional growth projections in a manner that reduces criteria pollutant and greenhouse gas emissions and promotes public health. Please see Final EIR, responses to Comments F.8-20, F.8-191, and F.8-204 for further discussion.
RPC-326	Traffic	Commissioner Modugno suggested that, as Staff said, echoing the proponent, that there would not be two-way traffic, there would only be inbound traffic. But we know there's going to be 23,000 square feet of commercial and industrial space. So, unless they reserve all the houses -- unless they put an addendum saying that you have to be the fire person here, you have to have a job here, to work here -- which none of us have seen -- those -- there's going to be traffic both ways on the 5. 75,000 car trips will probably be both ways on the 5. So 50,000 residents, 60,000 -- fifty seven, plus inbound maybe 20,000. So that's an overriding consideration not to do it.	As this comment correctly notes, the Project will generate traffic that travels to and from the Project site, and some of these trips will travel in both directions along Interstate 5 (as shown on Draft EIR Table 5.10-21). As explained in Draft EIR Section 5.10, Traffic, Access, and Circulation, the North County Sub-Area Model provides an estimate of the Project's average daily trips. As shown on Draft EIR Table 5.10-19, the model projects that about 70,246 of the Project's average daily trips (i.e., 48 percent) will be internal to the Project site, while about 75,908 average daily trips (i.e., 52 percent) will be external to the Project site.

Testimony No.	Environmental Topic	Testimony	Response to Testimony
RPC-327	Miscellaneous	And I'm concerned about the process itself. I believe the Planning Commission is as independent as it can be. But at the same time I heard from Staff over and over that -- the same language that the proponent used -- the Net-Zero water, which we know is not true. They have to buy water from the State Water Project. And the Net-Zero energy, which is only the electricity and not the rest of the energy that it takes to make a house work. ... I'd be happy to. And so I thought about why that would be. And I realized that, if I worked with somebody for a decade or more, I would probably adopt their language, too. And I think that a more impartial take on this bad project should be taken. And please, due to the overriding considerations, do not do this project. Thank you.	The Commenter's concerns have been heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. As the lead agency, the County has complied with CEQA requirements, and has maintained an appropriate and independent relationship with the Project Applicant. The Project's water supplies are discussed in Section 5.18, Water Resources. As discussed on Draft EIR pages 5.18-2 and -51 to -67, and as summarized in Tables 5.18-10 to 5.18-12 for normal or average, single-dry, and multiple-dry years, the Project will utilize several water supplies and on- and off-site water banking facilities to meet potable demand. Available supplies include groundwater and imported water return flows in accordance with the approved Antelope Valley Basin Adjudication Judgment and Physical Solution; State Water Project (SWP) supplies secured for Project use and imported to the site under an agreement with the Antelope Valley – East Kern Water Agency (AVEK); and AVEK service area deliveries. Indoor wastewater will be conveyed to one of two Project on-site treatment facilities; will be treated to State unrestricted reuse standards; and will be distributed to meet approximately 40 percent of buildout water demand. The Project's water supplies will sustainably meet buildout potable and recycled water demands and will maintain an average annual reserve supply of more than 79,000 acre-feet, or more than 11 years of full-buildout potable water demand, after buildout has been achieved. The analysis of the Project's water supplies is consistent with and based on the most current projections prepared by state and regional public agencies with specific expertise and responsibility for analyzing water supplies, including imported and ground water, under applicable laws, regulations and policies. The Project's use of recycled water is consistent with state and regional policies, rules and regulations that encourage the use of recycled water to reduce demand for potable water supplies. In the Project development agreement, the Project has made a commitment to achieve a "net zero carbon for the electric sector" standard on all public and private facilities constructed within the Project, which means that carbon emissions created to produce electricity that is consumed within the Specific Plan area will be offset with an equivalent amount of carbon emission reductions that result from quantified greenhouse gas emission reductions as documented over time as part of each application for a tentative tract map. This testimony does not address the adequacy of the EIR, and no further response is required.

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3.5 RESPONSES TO CORRESPONDENCE RECEIVED PRIOR TO AUGUST 29, 2018 REGIONAL PLANNING COMMISSION HEARING

All comment letters received by the County through August 22, 2018 have been included and responded to herein. Comments that raise environmental issues pertinent to the analysis presented in the EIR have been thoroughly addressed in these responses.

With respect to the new comments letters received, individual comments within the body of each letter have been identified and numbered. Brackets delineating the individual comments and a numeric identifier have been added to the right margin of the letter. Responses to each bracketed comment are included on the page(s) following each comment letter, and the electronic PDF file includes hyperlinks between the comment and the associated response to facilitate ease of review.

Table 3.5-1 below presents a summary listing of the additional comment letters received, including the commenting agency/individual; the assigned numbering for each comment letter; the date of the correspondence; and the page number where the comment letter can be found herein.

TABLE 3.5-1
ADDITIONAL LIST OF COMMENTERS

Comment Letter Category		Date of Correspondence	Follows Page Number
Letter No.	**Commenter**		
A. Federal Agencies			
-	-	-	-
B. State Agencies			
-	-	-	-
C. County Agencies			
ADD-C.2	Kern County	July 17, 2018	3-344
D. Regional Agencies			
-	-	-	-
E. Local Agencies			
-	-	-	-
F. Organizations			
ADD-F.8	Botanic Gardens Conservation International	July 5, 2018	3-346
ADD-F.9	Antelope Acres Town Council	July 7, 2018	3-348
ADD-F.10	Antelope Acres Town Council	July 9, 2018	3-352
ADD-F.11	Save Our Rural Town	July 9, 2018	3-362
ADD-F.12	California Native Plant Society	July 10, 2018	3-368
ADD-F.13	TriCounty Watchdogs	July 10, 2018	3-370
ADD-F.14	Palmdale Regional Medical Center	July 6, 2018	3-390
ADD-F.15	TriCounty Watchdogs	August 15, 2018	3-392
ADD-F.16	California Native Plant Society	August 17, 2018	3-394

TABLE 3.5-1
ADDITIONAL LIST OF COMMENTERS

Comment Letter Category		Date of Correspondence	Follows Page Number
Letter No.	**Commenter**		
ADD-F.17	California Native Plant Society	August 17, 2018	3-400
G. Individuals			
ADD-G.49	Form Letter 6 – Various Commenters	Various Dates	3-402
ADD-G.50	Richard J. Jackson, MD, MPH, FAAP	July 6, 2018	3-404
ADD-G.51	Terry Grill	July 10, 2018	3-408
ADD-G.52	Brian Esquivel	July 10, 2018	3-410
ADD-G.53	Carol Bornstein	July 10, 2018	3-412
ADD-G.54	Zack Scrivner	July 18, 2018	3-414
ADD-G.55	Ben Oswald	July 18, 2018	3-416
ADD-G.56	Joseph Medeiros	July 30, 2018	3-418
ADD-G.57	Stephanie Pincetl	August 6, 2018	3-420
ADD-G.58	David Swanson	August 8, 2018	3-428
ADD-G.59	Kathleen Trinity	August 18, 2018	3-430
ADD-G.60	Form Letter 7 – Various Commenters	August 4, 2018	3-436
ADD-G.61	Form Letter 8 – Various Commenters	Various Dates	3-438
ADD-G.62	Form Letter 9 – Various Commenters	Various Dates	3-440
ADD-G.63	Form Letter 10 – Various Commenters	Various Dates	3-442

C. County Agencies

CENTENNIAL

at TEJON RANCH

ADD-C.2

Lorelei H. Oviatt, AICP, Director
2700 "M" Street, Suite 100
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PLANNING AND NATURAL RESOURCES DEPARTMENT

Planning
Community Development
Administrative Operations

July 17, 2018

File; LA County
Centennial SP

David W. Louie, Chair
Los Angeles County Regional Planning Commission
320 W. Temple Street
Los Angeles, California 90013

RE: Centennial Specific Plan (Project No. 02-232-(5))

Dear Commissioners,

Kern County Planning and Natural Resources has been tasked by the Kern County Board of Supervisors since 2002 to review and provide comments on the Los Angeles County Centennial Specific Plan project by Tejon Ranch Corp. Located less than 1 mile from the Kern-Los Angeles County boundary in the Antelope Valley, it is a portion of the historic Tejon Ranch which encompasses over 270,000 acres with the majority of the land being located in Kern County.

In 2008, Tejon Ranch made a binding commitment to permanently preserve over 90% (240,000 acres) of the historic ranch lands identified as important for biological values and wildlife corridors with the Ranch wide Agreement. The remaining lands have been designed for complete communities to include a jobs-housing balance and sensitivity to biological and cultural values

With full Environmental Impact Reports and extensive public input, Kern County has approved and is implementing, the Tejon Industrial Complex and Commerce Center (16 million square feet of industrial/commercial) with over 2,300 current jobs with new businesses under construction, the Tejon Mountain Village Specific Plan, (2009) with 3,450 mountain homes and 21,000 acres of open space beyond the Ranch Wide Agreement and the Grapevine Specific and Community Plan (2016) with 12,000 homes of all types with 5.1 million square feet of commercial–industrial development. The remaining developments to be considered are the Centennial Specific Plan in Los Angeles County that is before your Commission and a remaining 7,600 acre project adjacent to the Grapevine plan in Kern County.

ADD-C.2-1

Providing for new housing in California will not be achieved only through infill development. For every rebuilding of an urban community displaces a community that has enjoyed years of reasonable rent or stable home ownership. And placing new homes next to older industrial development solves one problem by creating another. The Antelope Valley Area Plan, the Los Angeles County Board of Supervisors adopted in 2015, articulated the Town and Country Vision Statement that included an acknowledgement that the "growing population's need for additional housing and employment opportunities is balanced against the need to respect historical heritage and preserve the natural environment." The Centennial Specific Plan, along with the projects approved in Kern County, will provide housing solutions for all income levels along with locations near job centers. It is consistent with the vision and policies of your adopted Antelope Valley Area Plan and with the requirements your Commission has placed on the project along with the new requirements for mandatory solar, this community will represent a significant contribution to providing

homes that do not cost $760,000 for a starter home while implementing the new California communities standards set by Los Angeles County on energy, water, and transportation as well as walkable complete communities.

The Centennial Specific Plan project will complete the work Tejon Ranch started in 2008 to comprehensively plan the ranch for both permanent conservation and thoughtful, well–planned affordable development with jobs, parks, schools, and open space. Certainly this is a complex project with many different viewpoints on where development should occur in California. But the opportunity to master plan over 8,400 acres that will not displace any existing homeowners or renters while providing critically needed new housing and jobs using existing transportation corridors should be an important factor in your decision making process.

ADD-C.2-1 cont.

Thank you for your consideration of these comments. Kern County is in the process of updating our General Plan county-wide and we look forward to our continued work with L.A. Regional Planning on ensuring our neighboring communities communicate and plan together.

Sincerely,

LORELEI H OVIATT, AICP, Director
Kern County Planning and Natural Resources Department

cc: Kern County Supervisor Scrivner – District 2

Response to Comment Letter ADD-C.2
Kern County
July 17, 2018

Response to Comment ADD-C.2-1:

Thank you for your participation in this public process. The Commenter's support for the Project is noted and this comment will be provided to the Regional Planning Commission and Board of Supervisors for consideration. This comment does not address the adequacy of the EIR and, therefore, no further response is required.

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F. Organizations

CENTENNIAL

at TEJON RANCH

Botanic Gardens
Conservation International
Descanso House, 199 Kew Road
Richmond, Surrey, TW9 3BW, U.K.

Tel: +44 (0)20 8332 5953
Fax: +44 (0)20 8332 5956
E-mail: info@bgci.org
Internet: www.bgci.org

ADD-F.8

Mr. Jodie Sackett
County of Los Angeles
Department of Regional Planning
Hall of Records, 13th Floor, Room 1348
320 West Temple Street
Los Angeles, CA 90012
jsackett@planning.lacounty.gov

Re: Centennial Project Draft Environmental Impact Report

5th July 2018

Dear Mr. Sackett,

I was fortunate enough to visit Tejon Ranch in October 2016, and now read with dismay that the intention is to develop over 5,000 acres of the site into a city of 55,000 inhabitants.

My organisation, Botanic Gardens Conservation International (www.bgci.org), is the largest plant conservation network in the world with 800 member organizations in 100 countries, including around 70 members in the US. We are not a lobbying organization. Instead, the botanical institutions in our network carry out practical plant conservation work, including restoration of transformed habitats. It is inexplicable to us that, while the federal Government, civil society and many of our member organisations spend tens of millions of dollars a year on *restoring* damaged habitats, planning applications are still being made to destroy natural habitats.

ADD-F.8-1

We are asking the Regional Planning Commission to not recommend approval of the project for the following reasons:

The areas earmarked for the Centennial development would destroy thousands of acres of the best native perennial grassland that remains in California. The project site also comprises vast fields of wild flowers and, critically, these habitats have not been invaded by non-native plants. More specifically, the project will affect a number of rare plant species including:

- *Navarretia setiloba*, CRPR 1B (Piute Mountains navarrettia)
- *Microseris sylvatica*, CRPR 4 (sylvan scorzonella)
- *Atriplex coronata* var. *coronata*, CRPR 4 (crownscale)
- *Chorizanthe spinosa*, CRPR 4 (Mojave spineflower)
- *Perideridia pringlei*, CRPR 4 (adobe yampah)
- *Androsace elongata* subsp. *acuta*, CRPR 4 (California androsace)

ADD-F.8-2

Charity Registration No. 1098834

Botanic Gardens Conservation International is a company limited by guarantee in the UK, No. 4673175.
BGCI is a worldwide membership organization established in 1987. Its mission is to mobilise botanic gardens and engage partners in securing plant diversity for the well-being of people and the planet.

Botanic Gardens Conservation International
Descanso House, 199 Kew Road,
Richmond, Surrey, TW9 3BW, U.K.

Tel: +44 (0)20 8332 5953
Fax: +44 (0)20 8332 5956
E-mail: info@bgci.org
Internet: www.bgci.org

As well as the direct impacts associated with habitat removal, our concern is that indirect impacts, such as the setting of fires, poaching, noise and pollution, will have an equally detrimental effect on surrounding areas of pristine wilderness and the wildlife that currently inhabits it. In short, the whole of Tejon Ranch will be affected by the proximity of such a high density of people. ADD-F.8-3

None of the proposed mitigation measures come close to addressing these impacts. ADD-F.8-4

Globally, humans have completely transformed >50% of the ice-free terrestrial landscape and an estimated 83% of the terrestrial landscape has been directly influenced by human activities[1]. The state of California has an international reputation for protecting the environment. It is important that California continues to show leadership and sets an example for others. Surely there must be other, more suitable sites already transformed by humans, with low conservation value and with better transport links, lower earthquake risk etc. I do hope that a better outcome for all is possible. ADD-F.8-5

Yours sincerely

Dr Paul P. Smith
Secretary General
Botanic Gardens Conservation International
Descanso House,
199 Kew Road,
Richmond, Surrey,
TW9 3BW
United Kingdom.

Tel: +44 (0)20 8332 5940
Email: Paul.Smith@bgci.org
Skype: bgci_paul

BGCI: www.bgci.org
Global Trees Campaign: www.globaltrees.org
Ecological Restoration Alliance of Botanic Gardens: www.erabg.org

[1] Hooke et al. (2012). Land transformation by humans: a review. *GSA Today*, v. 22, no. 12, doi: 10.1130/GSAT151A.1

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Response to Comment Letter ADD-F.8
Botanic Gardens Conservation International
July 5, 2018

Response to Comment ADD-F.8-1:

Thank you for your participation in this public process. The Commenter's opposition to the Project is noted and this comment will be provided to the Regional Planning Commission and Board of Supervisors for consideration. This comment does not address the adequacy of the EIR and, therefore, no further response is required.

Response to Comment ADD-F.8-2:

Draft EIR Section 5.7, Biological Resources, discloses the Project's potential impact to grasslands and determines that direct and indirect impacts would be mitigated to a less than significant level, but cumulative impacts to native grasslands would be a cumulative significant impact. (Draft EIR, pages 5.7-158 to -162, Section 7.0, Cumulative Impacts, page 7-16.) Project implementation would include mitigation at a ratio of at least 2:1 for grasslands, resulting in improved functions and values of grasslands on the Project site, in addition to preservation in perpetuity within the 39,000-acre Centennial Mitigation Preserve as described in PDF 7-1 on page 5.7-135 of the Draft EIR. Intensive, multi-year grassland studies have revealed that the grasslands on the Project site are not unique, and grasslands of equal or greater value occur in vast quantities in the Mitigation Preserve. Please see Final EIR, responses to Comments B.4-17, B.4-43, B.4-63, F.7-22, F.8-124, F.8-125, F.8-127, F.8-128, and F.8-131 for further discussion of grasslands.

The Commenter is correct that the six specific special-status plant species listed would be impacted by Project implementation, as shown in Draft EIR Exhibit 5.7-11a, Special Status Plant Species Observation with Impact Boundary. The EIR identifies an appropriate overall mitigation ratio of 2:1 to reduce potential impacts to each of these species to a less than significant level. The Project's priority shall be preservation of the six special status plant species. Beyond preservation, the preferred method for achieving the 2:1 replacement ratio of special status plant species is enhancement or expanding of existing populations. Per MM 7-1, prior to issuance of grading permits, detected special status plant species populations on the Mitigation Preserve meeting the 2:1 mitigation ratio, shall be quantified and documented for preservation in perpetuity. If the preservation ratio is less than 2:1 for one or more of the six impacted species, enhancement and/or creation to expand preserved population(s) of the species to a quantity representing a minimum 2:1 ratio within the Mitigation Preserve shall be undertaken. For further discussion of these species, please see Draft EIR, Section 5.7, Biological Resources, pages 5.7-142 to -145 and Final EIR, responses to Comments F.8-128 to F.8-131.

Response to Comment ADD-F.8-3:

Per CEQA requirements, the Project EIR duly analyzes both direct and foreseeable indirect impacts of the Project on the environment, including with regard to fire (Draft EIR, pages

5.7-1, -36 to -39), biological resources (Draft EIR, pages 5.7-1, -139, -141, -142, -149, -150, -166 to -170, -188, -195) noise (Draft EIR, pages 5.12-1, -21 to -34), and both solid waste (Draft EIR pages 5.17-1, 28 to -35) and air quality (Draft EIR, pages 5.11-1, -40 to -78). The Commenter's opinion is noted and will be provided to the Regional Planning Commission and Board of Supervisors for consideration. This comment does not address the adequacy of the EIR, and no further response is required.

Response to Comment ADD-F.8-4:

The Commenter's opinion is noted for the record and will be provided to the Regional Planning Commission and Board of Supervisors for consideration. The comment presents no evidence that biological impact mitigation measures would be ineffective in reducing impacts. The EIR thoroughly analyzes potential Project-related impacts on the environment, identifies fully enforceable mitigation measures that reduce impacts to the greatest extent feasible, and identifies impacts for which despite the identification of all feasible mitigation, impacts would be significant and unavoidable. Per CEQA, the Board of Supervisors may determine that the Final EIR has considered the identified means of lessening or avoiding the Project's significant effects and that to the extent any significant direct or indirect environmental effects, including cumulative project impacts, remain unavoidable or not mitigated to below a level of significance after mitigation, such impacts are acceptable in light of the social, legal, economic, environmental, technological and other Project benefits that override them. See Draft CEQA Findings Regarding the Centennial Specific Plan Project and EIR, and Draft Statement of Overriding Considerations, for more details.

Response to Comment ADD-F.8-5:

The Commenter's opinion that an alternative site would be more appropriate for the Project is noted and will be provided to the Regional Planning Commission and the Board of Supervisors. However, the County disagrees. The Project has been sited and designed to promote regional "smart growth" planning principles established by the Southern California Association of Governments' (SCAG) 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy and the County's Antelope Valley Area Plan (AVAP) for the purpose of accommodating regional growth projections in a sustainable manner that reduces criteria air pollutant and greenhouse gas emissions and promotes public health while protecting regional open space, Sensitive Ecological Areas and agricultural areas consistent with the AVAP's Rural Preservation Strategy. See Draft EIR Section 8.4.1 (which discusses why an alternative site was not evaluated in detail in the Draft EIR) and Final EIR, response to Comment F.8-20 for further discussion.

County of Los Angeles
Department of Regional Planning
Hall of Records, 13th Floor, Room 1348
320 West Temple Street
Los Angeles, CA 90012

July 7, 2018

Attention: Mr. Jodie Sackett:

Centennial Project #02-232 Comments on DEIR

After reviewing the Draft Environmental Impact Report for the Centennial Project, the Summary of Significant Environmental Impacts would be the best reason to deny this development. ADD-F.9-1

There is nothing in the DEIR that states how you can guarantee there would be 1.3 jobs per dwelling unit, as stipulated in the Antelope Valley Area Plan (AVAP) and Economic Opportunity Area (EOA). What measures are there already written up to insure this is done with the first dwelling unit built? If Lancaster and Palmdale have problems recruiting companies to cities, what makes Centennial sure that companies will move there just because they have designated zoning for commercial businesses? ADD-F.9-2

The project states it cannot mitigate traffic impacts on the I-5 and Highway 138 even with proposed mitigations in the Centennial Transportation Improvement Plan. If the mitigations were possible, Los Angeles and the 14 Freeway and the I-5 Freeway would not be the traffic mess that they currently are from Lancaster and Palmdale. ADD-F.9-3

According to the FEIR, the Project will cumulatively exceed official regional or local population projections. How does this contribute to the Quality of Life for residents of Los Angeles County? ADD-F.9-4

The FEIR erroneously states that the Project will not physically divide an established community. The established rural community of Antelope Acres which goes from Avenue J to the Kern County line will be completely divided in half by the “improvements” to Highway 138 as a result of the Project, as per CAL TRANS Northwest Highway 138 EIR . Why was this not correctly stated as part of the cumulative impacts? ADD-F.9-5

Regardless of all the recycling programs, which may or may not develop as envisioned, the County cannot guarantee there will be landfill space for all the "trash" that will be needed to be disposed of because of this project. See Section 5.17.22. Why would a plan like this be approved when the County has acknowledged that the future generations would inherit this problem? ADD-F.9-6

Thank you for addressing our concerns.

Sincerely,

Virginia Stout
President
Antelope Acres Town Council

Response to Comment Letter ADD-F.9
Antelope Acres Town Council
July 7, 2018

Response to Comment ADD-F.9-1:

Thank you for your participation in this public process. The Commenter's opposition to the Project is noted and this comment will be provided to the Regional Planning Commission and Board of Supervisors for consideration. This comment does not address the adequacy of the EIR and, therefore, no further response is required.

Response to Comment ADD-F.9-2:

To the extent this comment assumes that the AVAP or CEQA requires the Project to guarantee that it will create 1.3 jobs per dwelling unit, this comment is incorrect. As explained in the AVAP Economic Development element's "vision and strategy" statement, the AVAP "provides for a jobs-to-housing ratio of approximately 1.3 jobs for every household in the unincorporated Antelope Valley, a far improvement over the ratio of approximately one job for every five households established by the 1986 Antelope Valley Areawide General Plan."[3339] The AVAP does not, however, include any goals or policies that mandate that the Project achieves a 1.3 jobs-to-housing ratio, as this comment incorrectly suggests. Rather, the AVAP sets a strategy of designating areas for light and heavy industrial uses near major transportation corridors and/or the concentration of a skilled labor force in Economic Opportunity Areas, as explained on page 5.9-3 of the Draft EIR. The Project's land use plan implements this strategy and would provide an estimated jobs/housing ratio of 1.22 through the development of commercial and business park uses on the site, thus positively contributing to the attainment of the AVAP's targeted jobs-to-housing ratio. As explained on Draft EIR page 5.9-31, no measures to reduce the Project's projected population and employment growth would be appropriate because the Project is consistent with approved regional growth plans. With regard to this comment's query regarding the EIR's job growth assumptions, as explained in Draft EIR Section 5.9.3 (pages 5.9-18 through 5.9-22, and pages 5.9-29 through 5.9-30), such assumptions are reasonable and based on the most current regional employment growth projections published by the Southern California Association of Governments (SCAG), which SCAG adopted as part of its 2012 and 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) planning documents.

Response to Comment ADD-F.9-3:

The Commenter's opinion regarding the feasibility of mitigating traffic-related impacts is noted and will be provided to the Regional Planning Commission and Board of Supervisors. However, the County disagrees and notes that the Commenter misstates EIR analysis and conclusions. As explained in Draft EIR, Section 5.10, Traffic, Access, and Circulation, under Thresholds 10-1 and 10-2, in accordance with the MMRP, the Project must provide the

[3339] AVAP at ED-2.

required funding for the implementation of all identified roadway and highway improvements necessary to reduce Project-related impacts to a less than significant level, either through an agreement with Caltrans (referred to as the Traffic Mitigation Agreement) or by contributing fair share funding for these improvements. If built, improvements identified in the MMRP would mitigate all potential Project-related significant impacts to SR-138 and other state highways to less-than-significant levels. In each case, the MMRP specifically requires that Project funding be provided either in accordance with the agreement with Caltrans and in accordance with timing set forth in that agreement, or prior to final map recordation. Consequently, all of the highway facility improvements required to address potential Project-related significant impacts identified in the EIR as mitigation measures are fully enforceable and must be completed before each phase of development may occur. However, as recognized in the EIR, Caltrans is legally responsible for implementing planned improvements of State facilities, and the Project Applicant and the County do not have the authority to require that Caltrans do so. For this reason, the EIR concludes that if improvements are not implemented, the Project would contribute to significant and unavoidable impacts. This is appropriate under CEQA, because implementation of the improvements is within the responsibility of another public agency and not the lead agency. See CEQA Guidelines § 15091(a)(2); CEQA §21081(a)(2).

Response to Comment ADD-F.9-4:

As discussed on Draft EIR page 7-18, and in Draft EIR Section 5.9, Population, Housing, and Employment, the Project would accommodate growth in the Antelope Valley consistent with the AVAP and the intent of the designated West EOA. The Project would accommodate projected regional growth in employment, housing, and population that is consistent with the growth projections for the area, as incorporated into the AVAP and the 2012 and 2016 RTP/SCS.

As disclosed in the Draft EIR on pages 5.9-24 and 5.9-28, the resident population of the Project at buildout would be 82.46 percent of SCAG's projected population of the two traffic analysis zones (TAZs) covering the Project site by 2035, but would exceed the SCAG population projections for 2040 by approximately 10 percent. As explained on Draft EIR page 5.9-28, this population exceedance is likely attributable to the average household size used in the SCAG projections. The EIR conservatively assumes an average household size of 3.17 persons per household for single-family detached units and 2.38 persons per household for attached and multi-family units, whereas SCAG assumes an average household size of 2.3 persons per all housing types. Nevertheless, the Project's proposed buildout estimates are consistent with SCAG's 2040 household growth projections for the TAZs that cover the Project site, as discussed on Draft EIR page 5.8-28. Since the Project is consistent with SCAG's household projections, and since SCAG's TAZ level data is considered advisory and non-binding, the Draft EIR does not consider the Project's 2040 exceedance in population projections at the TAZ level a significant adverse impact.

With regard to this comment's concerns regarding quality of life, the Project is expected to have a beneficial impact on the quality of life in the region in that it will help accommodate projected growth in the region, contribute to meeting the County's State-mandated Regional

Housing Needs Assessment housing production targets, help achieve the AVAP's targeted jobs/housing ratio by providing new regional employment opportunities, and by providing a range of new recreational opportunities that will be accessible by residents of the region. Quality of life is a social concern and is not a physical environmental impact required to be analyzed in CEQA documents. See CEQA Guidelines Section 15064(e). All adverse physical environmental impacts that could affect County residents are disclosed in the EIR and all feasible mitigation to reduce such impacts will be incorporated into an enforceable Mitigation Monitoring and Reporting Program that is specific to the Project.

Response to Comment ADD-F.9-5:

The Project's potential to physically divide an established community is analyzed in Draft EIR Section 5.8, Land Use (pages 5.8-18 through 5.8-19). As explained in the EIR, the Project site is generally undeveloped and is not part of an established community that would be divided with implementation of the Project. Caltrans' Northwest State Route 138 Corridor Improvement Project (SR-138 Improvement Project) is a separate action being undertaken by a separate lead agency and is not "a result of the Project," as this comment incorrectly assumes. In any case, the SR-138 Improvement Project's potential to physically divide an existing community were fully analyzed in *Northwest State Route 138 Corridor Improvement Project Environmental Impact Report/Environmental Impact Statement* prepared by Caltrans and was determined to be less than significant with implementation of mitigation. Please also see response to Comment ADD-F.10-5.

Response to Comment ADD-F.9-6:

The Commenter's concern about implementation of the Project's recycling commitments is noted and will be provided to the Regional Planning Commission and Board of Supervisors. However, the County disagrees. Mitigation measures and Development Agreement requirements related to recycling are fully enforceable. With regard to landfill space, Draft EIR Section 5.17, Other Public Services, appropriately evaluates Project impacts, noting that because permitted Class III landfill capacity cannot be guaranteed at the time of Project buildout and throughout the life of the Project, the EIR conservatively concludes that Project buildout would result in a significant impact on the County's anticipated Class III landfill capacity. Draft EIR, page 5.17-2. This is because the Los Angeles County Department of Public Works has a 15-year planning horizon for solid waste disposal. Nonetheless, the County is committed to handling all solid wastes generated within the County now and in the future, and PDFs 17-2 and 17-3 and MMs 17-9 and 17-10 reflect all feasible measures to reduce impacts and divert the Project's municipal solid waste generation. (*Id.,* page 5.17-2; Final EIR Appendix 2.0-C.Rev, pages C-143 to -145.) For further discussion of solid waste, see Draft EIR, pages 5.17-1, -2, -4, and -14 to -35.

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Dear Mr. Sackett: July 9, 2018

The Antelope Acres Town Council met on July 6, 2018 and determined that the Town Council is in opposition to the Centennial Project. ADD-F.10-1

We would like to provide the following comments. At this point in time we oppose the Project based on several factors. There are many unavoidable significant factors with regard to air quality, traffic, biological resources, special hazards, water quality and quantity, emergency services, public health and many additional impacts to our community. ADD-F.10-2

Additionally there are cumulative impacts as yet undefined or not yet adequately reviewed as the final documents have not had a substantial final review given an insufficient amount of time for a final review and comment period. ADD-F.10-3

Over the years the Centennial representatives have briefed our community on the progress of the project. This is an extremely significant undertaking to build a city of over 19,000 homes with a complete infrastructure to support a community of that size with manufacturing and commercial plans in place that will support almost 60,000 people. ADD-F.10-4

This project has permanent and inevitable far reaching effects on surrounding rural communities and

Antelope Acres will see unavoidable effects such as permanent traffic, noise, air quality and health impacts due to the project itself. Over time it will drive projected revisions to Interstate Hwy 5 and Hwy 138 which when implemented will change the face of our community forever and sacrifice at least sixteen properties which mean the loss of sixteen family homes to our community and that is the current projection, not necessarily the final plan. ADD-F.10-5

Our community has already been invaded by solar projects and the entities given the responsibility to protect us have not created a plan to assure that our health and safety are protected. ADD-F.10-6

Lancaster City officials and L. A. County Regional Planning have allowed all planned projects to be completed with no regard to their cumulative effects. ADD-F.10-7

There is no oversight to create sane growth in the renewable energy industry. Jurisdictional boundaries are adding to this dilemma as there are no coordinated efforts between the responsible entities to change these conditions. ADD-F.10-8

It concerns us that the AVAQMD (the lead agency) had “no comment” when the DEIR and the FEIR were released. ADD-F.10-9

The South Coast Air Quality Management District's (SCAQMD)s comments reported that "construction emissions would exceed significant air quality impacts would exceed CEQA significant thresholds for VOCs and NOx after incorporating Mitigation Measure (MM) 11-2 and MM 11-3 14 and that the localized construction impacts could be significant and unavoidable since construction activities in one or several planning areas may affect already-established sensitive uses within the proposed project area. After mitigation these impacts would remain significant and unavoidable." We strongly disagree with that statement and want strict oversight by L. A. County Planning to assure that CUP requirements are not abused. We do not want the future to tell a story of regrets that the Centennial Project overshadowed the rights of the residents of the west side of the Antelope Valley. ADD-F.10-10

"The Antelope Valley has never been properly assessed for compliance with the National or California Ambient Air Quality Standards (AAQS) for PM 2.5. And not properly assessed for compliance with the National AAQS for PM 10 though it is established that the Antelope Valley community does not comply with California's AAQS for PM 10. ADD-F.10-11

Is the AVAQMD relying on Fugitive Dust Rule 403 to police the effects of dust and air quality? This document is not adequate and needs review and revision. This is an important element of the project, for without a substantial enforceable plan the stated significant impacts may not be identified and monitored adequately as the air quality data is "undefined." ADD-F.10-12

Emphysema, COPD, Asthma and Valley Fever statists show dramatic increases in the Antelope Valley with no change in sight. California and the Antelope Valley still face a significant drought which will add to the near and long term air quality and health issues. The Antelope Valley already has the highest incidents of COPD in the United States and in 2017 had the second highest number of Valley fever cases in the State of California according to the L. A. County Dept. of Public Health. ADD-F.10-13

There are water quality and quantity issues pending due to the water adjudication lawsuit judgment. A Watermaster has been established which will affect everything from the loss of current agricultural land use by possibly forcing as much as 20,000 additional acres of farmland out of production. This will exacerbate the fugitive dust and air quality issues already identified, with no mention to adequate water being available for use. ADD-F.10-14

The health and safety of our residents and its wildlife are at stake. ADD-F.10-15

Sincerely,

Virginia Stout, President
Antelope Acres Town Council

Response to Comment Letter ADD-F.10
Antelope Acres Town Council
July 9, 2018

Response to Comment ADD-F.10-1:

Thank you for your participation in this public process. The Commenter's opposition to the Project is noted and this comment will be provided to the Regional Planning Commission and Board of Supervisors for consideration. This comment does not address the adequacy of the EIR and, therefore, no further response is required.

Response to Comment ADD-F.10-2:

The Commenter's opposition to the Project is noted and will be provided to the Regional Planning Commission and the Board of Supervisors. The Commenter is correct that the Project would have some significant and unavoidable impacts. The EIR thoroughly analyzes potential Project-related impacts on the environment, identifies fully enforceable mitigation measures that reduce impacts to the greatest extent feasible, and identifies impacts for which despite the identification of all feasible mitigation, impacts would be significant and unavoidable. Per CEQA, the Board of Supervisors may determine that the Final EIR has considered the identified means of lessening or avoiding the Project's significant effects and that to the extent any significant direct or indirect environmental effects, including cumulative project impacts, remain unavoidable or not mitigated to below a level of significance after mitigation, such impacts are acceptable in light of the social, legal, economic, environmental, technological and other Project benefits that override them. See Draft CEQA Findings Regarding the Centennial Specific Plan Project and EIR, and Draft Statement of Overriding Considerations, for more details.

Response to Comment ADD-F.10-3:

The Commenter's opinion regarding cumulative impacts is noted and will be provided to the Regional Planning Commission and Board of Supervisors for consideration. However, the County notes that the EIR thoroughly and appropriately analyzed potential cumulative impacts related to Project implementation consistent with CEQA requirements. See Draft EIR, Section 7.0, Cumulative Impacts. With regard to time available for review of the EIR, the County has complied with CEQA requirements, granted requests for extended review of the Draft EIR, and has provided ample time for review of the Final EIR, including the opportunity to attend and provide public testimony at Regional Planning Commission hearings dated June 6, 2018, July 11, 2018, and August 29, 2018. This general comment does not assert any specific inadequacies of the Draft EIR's cumulative impact analysis, and no further response is required.

Response to Comment ADD-F.10-4:

This comment is noted and will be provided to the Regional Planning Commission and Board of Supervisors for consideration. The Commenter is correct that the public has been

informed about the Project over the course of its planning and consideration. This general comment does not specifically address the Project or the adequacy of the EIR and no further response is required.

Response to Comment ADD-F.10-5:

As this comment correctly notes, the EIR has concluded that the Project would result in significant and unavoidable impacts related to air resources, biological resources, land resources, population and housing, traffic, noise, visual resources, solid waste, and climate change. Please see Draft EIR Section 5.10, Traffic, Access and Circulation, for a comprehensive analysis of the Project's potential impact on Interstate Highway 5 (I-5) and State Route 138 (SR-138), which concludes that the Project could have a significant impact on SR-138 if Caltrans does not implement planned improvements in accordance with Caltrans's Northwest Corridor Improvement Project.

To the extent this comment suggests that the Project would construct improvements to I-5 and/or SR-138 that would cause the loss of sixteen family homes in Antelope Acres, it is mistaken. In fact, as explained on Draft EIR page 5.8-19, construction associated with the Project would cause the loss of a single existing caretaker/employee residence that is located on the Project site. Project construction would not cause the loss of any residences located off-site. However, as discussed in more detail below, it is anticipated that Caltrans will implement its separate Northwest 138 Improvement Project, which Caltrans approved after publication of the Draft EIR. As discussed in Section 3.4.1.2 of Caltrans' Northwest State Route 138 Corridor Improvement Project Final Environmental Impact Report/Environmental Impact Statement (Caltrans EIR), the Northwest 138 Improvement Project's approved Preferred Alternative (Build Alternative 2) has the potential to displace an estimated 14 housing units and approximately 38 persons.[3340] The displacement area is located within two census tracts (Census Tracts 9009 and 9012.09) that includes Antelope Acres, among other communities.[3341] As explained in the Caltrans EIR, Caltrans has committed to providing relocation assistance and counseling to all displaced persons in accordance with the Federal Uniform Relocation Assistance and Rural Properties Acquisition Policies Act to ensure adequate relocation benefits to all displaced persons.[3342] The Caltrans EIR determined that related impacts would be less than significant.[3343]

With regard to the assertion that the Project will "drive projected revisions" to SR-138, the Northwest 138 Improvement Project addresses significant existing and reasonably anticipated future needs irrespective of Centennial approval and development. The project will be built in phases as need or as demand require, with short-term and mid-term improvements intended primarily to correct existing and potential safety conditions, including operational and safety improvements, such as intersection improvements, shoulder widening, and curve corrections. The corridor currently experiences accident rates double the statewide average, which alone necessitates significant improvements. The

[3340] Caltrans EIR at p. 75.
[3341] Caltrans EIR at p. 71.
[3342] Caltrans EIR at p. 75.
[3343] Caltrans EIR at p. 442.

substantial majority of the regional employment, household and population supporting the need for the Northwest 138 Improvement Project are related to current and projected regional activities other than Centennial development. Regional transportation plans that were prepared well in advance of the Centennial plan have called for these significant improvements to the SR-138 corridor. Consequently, significant portions of the approved Northwest 138 Improvement Project will be implemented irrespective of Centennial. If approved, Centennial will pay for SR-138 roadway improvements that are required to meet the incremental demand generated by the development.

Northwest 138 Improvement Project Background

A Final Environmental Impact Report (FEIR) and a Notice of Determination approving the Northwest 138 Improvement Project were completed by the California Department of Transportation (Caltrans) in cooperation with the Los Angeles County Metropolitan Transportation Authority (Metro) in June 2017 ("SR-138 FEIR"). As stated on page i of the SR-138 FEIR, the approved 138 Improvement Project would widen and improve approximately 36.8 miles of State Route 138 between the Interstate 5 interchange and the State Route 14 (SR-14) interchange.

The purpose and need for the Northwest 138 Improvement Project are discussed in detail on pages 4-9 of the Centennial Project Final EIR. As summarized below, the purpose and need for the Northwest 138 Improvement Project are based on many factors that are independent from Centennial development, including the following.

- *Goods movement and safety.* "SR-138 provides one of the primary routes for west-east traffic in NW Los Angeles County, and is an important strategic route during emergency closures of I-5 or SR-14 in this area. In the coming decades, NW Los Angeles County is anticipated to experience large-scale growth and increased economic activity, which is projected to generate traffic demands beyond the capacity of the existing facility. To address these needs, the NW SR-138 Corridor Improvement Project has been proposed. The need for the proposed project is derived from foreseeable increases in travel and goods movement and higher than average state-wide fatal accident rates (actual rate of 0.046/Million Vehicle Mile (MVM) versus 0.023/MVM for the statewide average)." (SR-138 FEIR page 4.)
- *Non-Standard Roadway Features.* "The existing roadway is a two-lane conventional highway with non- standard paved shoulders widths, non-standard stopping sight distance around horizontal and vertical curves and near the I-5 connectors, and four structures within the project limits do not meet the minimum vertical clearance standard and many Southern California Edison (SCE) poles adjacent to the existing highway are located within the Clear Recovery Zone (CRZ). There are a number of bridges and culvert crossings along the existing highway. Many of those structures were constructed prior to 1970. These facilities should be upgraded to current seismic design criteria and standard horizontal and vertical clearances. The area around the roadway has a drainage area in excess of 500 square miles. The western end of the project has several larger drainage crossings that convey the runoff from the southern mountain slopes northerly and westerly to the dry lake east of SR-14

and north of SR-138. The floodplain in this area is over 2 miles wide and flows to the north of SR- 138 west of the SR-14. This large drainage area would require upgrades to existing drainage facilities to meet the current roadway standards for the facility type. The horizontal and vertical curve on the western end of the project can be corrected to improve sight distance needed for safe stopping distance based on the posted speed limits. The intersection channelization would also help to allow vehicles turning off and onto the roadway to have a refuge area while waiting to cross oncoming traffic. Removal or reducing these types of conflicting movements would be important in all the build alternatives. Adding standard shoulders to the facility by widening the paved roadway would provide additional width for errant vehicles to recover and would also provide areas for stranded motorists to pull out of moving traffic." (SR-138 FEIR pages 6-7.)

- *Consistency with prior regional transit needs assessment.* "The North County Combined Highway Corridors Study (NCCHCS), completed in 2004, identified SR-138 as a bypass corridor. The NCCHCS recommended expansion of this section of SR-138 to a 6-lane freeway or expressway to accommodate anticipated traffic demands." FEIR page 8. "The NCCHCS was initiated to develop a multi-modal transportation plan for the northern portion of Los Angeles County that would address both short-term (2010) and long-term (2025) requirements to accommodate a variety of trip purposes and goods movements within the study area. Metro, in collaboration with the County of Los Angeles and the Cities of Lancaster, Los Angeles, Palmdale, and Santa Clarita, completed the study in 2004. The NCCHCS study evaluated three major North County Corridors (I-5, SR-14 and SR-138) to create an integrated major highway and transit investment strategy along the approximately 250 miles of transportation facilities in Northern Los Angeles County. The NCCHCS recommended improving the portion of SR-138 between the I-5 and SR-14 into a six-lane freeway/expressway. This recommendation was based trends at the time the study was conducted. The region was experiencing high growth rates and the improvement to SR-138 was a response to accommodate the projected population growth and expected substantial increases in goods movement truck traffic…. The NCCHCS identified the importance of this route for northern Los Angeles County. The route is one of just a few west to east corridors connecting I-5 on the west to SR-14 on the east. This connection links the Central Valley and the Antelope Valley and beyond. When I-5 or SR-14 experience congestion and delays, this alternate route provides a means for regional traffic to bypass the affected congested areas. This is a critical backup route for emergency access when other critical routes are blocked or closed." (SR-138 FEIR page 9.)

A portion of the Northwest 138 Improvement Project purpose and need is related to future growth, and the approval and development of Centennial would contribute to such growth. A large majority of the future population, household (home) and employment growth used to project future SR-138 traffic demand, however, will be generated by activities and in locations other than Centennial. The Northwest 138 Improvement Project EIR traffic analysis is based on a Traffic Analysis Report (TAR) prepared by Fehr and Peers in 2015. Table 2 of the TAR summarizes the growth assumptions used in the analysis, which includes

growth in Lancaster, Palmdale, Santa Clarita, and portions of Los Angeles County in Northwest 138 Improvement Project study area, such as the central and eastern economic opportunity areas designated by the County's approved Antelope Valley Area Plan. As shown in the following table, nearly 80 percent of the projected population and housing growth, and more than 70 percent of the employment growth in the TAR is projected to occur in locations other than Centennial.

	Net Growth in SR-138 Study Area Assumed in TAR by 2035	**Centennial at Buildout**	**Percent growth in TAR excluding Centennial**
Population	268,293	57,150	79%
Households	90,627	19,133	79%
Employment	84,909	23,675	72%

Due to existing safety, nonstandard roadway and drainage facilities, and projected growth with or without Centennial, the SR-138 FEIR concluded that *not* implementing the Northwest 138 Improvement Project would result in adverse impacts to traffic and the environment even if future SR-138 roadway volumes were lower:

> The No-Build Alternative would not accommodate the projected population growth or expected substantial increase in goods movement truck traffic in Northern Los Angeles County and the existing corridor would not be improved. As discussed in the Project Study Report/ Project Development Study (PSR/PDS), the existing SR-138 corridor is projected to degrade and operate consistently at a Level of Service (LOS) E and F for 2040 conditions (Caltrans, 2008). The No-Build Alternative could result in indirect impacts on air quality, mobility, safety, and the economy within Northern Los Angeles County. There would be increased maintenance costs to maintain the route without any other improvements.
>
> (SR-138 FEIR, Appendix B, page 8.)

Several comments on the SR-138 FEIR addressed the Centennial development. In each case, the FEIR responses emphasized that improvements to SR-138 are required and would be implemented irrespective of Centennial. SR-138 FEIR Comment G-9.3, for example, asserted that improvements along the west end of SR-138 were "obviously a concession" to Centennial, and that it would be "not advisable to use public funds to build a six-lane highway for a project than may not, and should not, be built out." In response to Comment G-9.3, the SR-138 FEIR stated that:

> The Centennial project is located in the Western Economic Opportunity Area as defined in the adopted Antelope Valley Area Plan. The SCAG model includes the approved land use of Los Angeles County and was utilized in developing travel demand forecasts for the project. Safety and operational improvements consistent with the elements identified in the TSM [Transportation System

> Management] Alternative, which has been rejected for further consideration, could be elements included in the early implementation phase of a Build alternative. The types of improvements that will make up the interim safety improvements include intersection improvements, including turning lanes and acceleration/ deceleration lanes; alignment corrections to the vertical and horizontal alignments to provide improved geometry, including the curve correction at County Road N, the Old Ridge route; and shoulder widening in areas to provide additional width for errant vehicles. The interim safety improvements address the short term needs in the corridor, but fail to meet the purpose and need in the long term for the corridor. TSM elements will be the priority for the near term improvements in the corridor. They are consistent with the implementation and improvements needed in the corridor now and will be incorporated as a priority into the selected alternative implementation plan.
>
> (SR-138 FEIR Appendix J, page 129.)

Similarly, SR-138 FEIR Comment L-13.4 questioned whether the potential construction of the western portion of SR-138 and the development of Centennial would adversely affect the rural character of existing communities. In its response to Comment L-13.4, the SR-138 FEIR stated that:

> The need for the project is based on an assessment of the existing and future transportation demand in the project area compared to the existing capacity of the facility. The improvements included in the alternatives were developed based on the approved land use plan by Los Angeles County and as defined in the Southern California Association of Governments (SCAG) forecast traffic volumes for the 2040 horizon year. The improvements will not be needed until the traffic increases and the traffic increases are based on how quickly the land use buildout occurs. As new locations are considered for development, Los Angeles County as the approving agency will need to determine future improvements that are required to meet the access locations agreed to with this project and provide for local circulation for property access as a condition of approval. It is anticipated that the early improvements in the corridor will focus on safety and operations and will not include capacity improvements. As the traffic increases in the corridor, the capacity improvements will be implemented, as funding is available.
>
> (SR-138 FEIR Appendix J, page 84.)

Conclusion

The SR-138 FEIR makes clear that the approved Northwest 138 Improvement Project addresses significant existing and reasonably anticipated future needs irrespective of Centennial. The official Northwest 138 Improvement Project website states that "[t]he project will be built in phases as need or as demand require. Short-term and mid-term improvements will focus on a proactive approach to correct existing and potential safety

conditions. The early phases of the project will include operational and safety improvements, including intersection improvements, shoulder widening, and curve corrections."[3344]

As shown above, at buildout the substantial majority of regional employment, household and population growth considered in the analysis of the need for SR-138 improvements would be generated by regional activities and safety, modernization and other factors that would occur with or without Centennial. Centennial will provide funding for State Route 138 roadway improvements that are required to meet the incremental demand generated by the development. Consequently, comments suggesting that the Northwest 138 Improvement Project would not be implemented without Centennial, or that roadway improvements for Centennial will require a net outlay of public funds, are not accurate.

Response to Comment ADD-F.10-6:

The Commenter's opinion regarding separate solar projects is noted and will be provided to the Regional Planning Commission and Board of Supervisors for consideration. This comment does address the Centennial Project or the adequacy of the EIR, and no further response is required.

Response to Comment ADD-F.10-7:

The Commenter's opinion regarding separate projects is noted and will be provided to the Regional Planning Commission and Board of Supervisors for consideration. This comment does not address the Centennial Project or the adequacy of the EIR, and no further response is required. The County notes that the EIR thoroughly and appropriately analyzes cumulative Project-related impacts consistent with CEQA requirements. See Draft EIR, Section 7.0, Cumulative Impacts.

Response to Comment ADD-F.10-8:

The Commenter's opinion regarding separate, renewable energy projects is noted and will be provided to the Regional Planning Commission and Board of Supervisors for consideration. This comment does not address the Centennial Project or the adequacy of the EIR, and no further response is required.

Response to Comment ADD-F.10-9:

The Commenter's concern regarding lack of AVAQMD comments on the Draft EIR is noted and will be provided to the Regional Planning Commission and Board of Supervisors for consideration. However, AVAQMD does have an important role in the CEQA process for this Project. As described in Draft EIR Section 4.8, Intended Use of the EIR, the County is lead agency for the Project and AVAQMD is a responsible agency. (Draft EIR, pages 4-102 and -110.) Approximately 85 percent of the Project site lies within the Mojave Desert Air Basin, over which AVAQMD has jurisdiction for air quality. Developers and businesses who plan to

[3344] Metro. 2018 (July 17, accessed). Northwest 138 Corridor. Los Angeles, CA: Metro. https://www.metro.net/projects/nw138/.

install equipment with the potential to emit air pollutants, including toxic and hazardous air pollutants, must obtain permits from the applicable Air Quality Management District prior to construction or operation. Examples of businesses and equipment that require permits are gas stations, dry cleaners, emergency generators, boilers for heating and hot water in large buildings, restaurant cooking equipment, and manufacturing facilities. Accordingly, AVAQMD was provided with an opportunity to review the EIR and is expected to use the information in the EIR for consideration of approvals related to and involved in the implementation of the Project. This comment does not specifically address the Project or the adequacy of the EIR, and no further response is required.

Response to Comment ADD-F.10-10:

This comment's expressed disagreement with certain comments on the Draft EIR that were submitted by SCAQMD is noted. The referenced SCAQMD comments, however, merely reiterate the independent conclusions of the EIR regarding the Project's potential impacts related to VOC and NOx emissions, as set forth in Draft EIR Section 5.11, Air Resources. As this comment correctly notes, the Project's requested land use approvals include Conditional Use Permits (CUPs) for grading and for the approval of Project-related infrastructure, as explained on Draft EIR page 1-4. Violations of the terms and conditions of a CUP are fully enforceable by the County and are subject to abatement as a public nuisance in accordance with Los Angeles County Municipal Code Chapter 1.23. This comment's general concerns about the Project and its potential impacts on Antelope Valley residents is noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration.

Response to Comment ADD-F.10-11:

Consistent with this comment, Draft EIR page 5.11-23 explains that, with respect to PM10, the Antelope Valley portion of the Mojave Desert Air Basin has been designated as "nonattainment" by CARB (for purposes of state air quality standards) and as "unclassifiable" by USEPA (for purposes of federal air quality standards). With respect to PM2.5, the Antelope Valley portion of the Mojave Desert Air Basin has been designated as "unclassified" by CARB (for purposes of state air quality standards) and as "unclassifiable" by USEPA (for purposes of federal air quality standards). As explained in the Draft EIR at page 5.11-23, the USEPA designates an area as "unclassifiable" if, based on available information, it cannot be classified as either meeting or not meeting the national primary or secondary ambient air quality standard for that pollutant. For CARB, an "unclassified" designation indicates that the air quality data for the area are incomplete and do not support a designation of attainment or nonattainment. This comment is noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration.

Response to Comment ADD-F.10-12:

As discussed on Draft EIR page 5.11-65, the Project would be required to implement fugitive dust control measures pursuant to the SCAQMD Rule 403 and the AVAQMD Rule 403, both of which require best available control measures to ensure that dust is not visible beyond

the property line, including but not limited to watering exposed surfaces and haul roads three times daily, replacing ground cover in disturbed areas quickly, covering stock piles with tarps, and limiting speeds on unpaved roads to 15 miles per hour. Consistent with SCAQMD Rule 403, MM 3-1 requires that, prior to beginning any on-site construction activity, a Dust-Control Supervisor be retained who will be on site within 30 minutes of the start of work taking place each morning; will have the authority to expeditiously employ sufficient dust mitigation measures to ensure compliance with Rule 403; and will have completed the SCAQMD Fugitive Dust Control class and must have been issued a valid Certificate of Completion for the class. This measure will be a requirement of the Project's Mitigation Monitoring and Reporting Program and fully enforceable by the County. Additionally, as required by AVAQMD Rule 403, a Supplementary Dust Control Plan is required to minimize emissions of respirable particulate matter near sensitive receptors. This comment does not raise any specific concerns regarding the adequacy of the EIR and, therefore, no further response is required.

Response to Comment ADD-F.10-13:

The health effects of air pollutants associated with the Project, including *Coccidioides immitis* spores that cause Valley Fever, are analyzed in Draft Section 5.11, Air Resources (pages 5.11-5 through -10 and 5.11-28 through -29), and in Section 5.3, Hazards and Fire Safety (pages 5.3-13 through -19). As disclosed in the Draft EIR (see, e.g., page 5.3-13), many of these adverse health effects are on the rise in Los Angeles County. As this comment correctly notes, dry conditions contribute to Valley Fever exposure as the fungus is often found in arid soils. This comment does not raise a specific concern regarding the adequacy of the EIR and therefore no further response is required.

Response to Comment ADD-F.10-14:

This comment references the adjudication Judgement and Physical Solution that regulates the Antelope Valley groundwater basin and was approved by the California Superior Court in December 2015, as discussed in the Draft EIR at pages 5.18-14 through 5.18-15. The adjudication establishes a regional watermaster to regulate groundwater use consistent with applicable law under the auspices of the court. This comment's general reference to water quality and quantity issues that are purportedly "pending due to the adjudication lawsuit judgement" is not explained by the commenter and is thus unclear. However, the commenter speculates that the adjudication will result in the fallowing of 20,000 acres of farmland and further speculates that such fallowing will exacerbate fugitive dust and air quality issues. The Project, however, would not cause the fallowing of any farmland, and CEQA does not require the EIR to engage in speculation regarding the adjudication's potential indirect environmental effects on air resources. The EIR acknowledges that the control of fugitive dust is key to preventing exposure to Valley Fever spores and other pollutants that cause adverse health effects.[3345] Fugitive dust control measures would be required and implemented by the Project as required by AVAQMD Rule 403 and SCAQMD Rule 403. Both of these rules require that dust be controlled so as not to be visible beyond

[3345] See, e.g., Final EIR at 5.11-65.

the property line and enforced by the AVAQMD and SCAQMD. The rules also include comprehensive sets of best available control measures that reduce fugitive dust generation and are required for all projects within the AVAQMD and SCAQMD jurisdictions. This comment does not raise a specific concern regarding the adequacy of the EIR and therefore no further response is required.

Response to Comment ADD.F.10-15:

The Commenter's opinion with regard to the health and safety impacts of the Project on residents and wildlife is noted and will be provided to the Regional Planning Commission and Board of Supervisors for consideration. However, the County disagrees, and notes that after thorough and appropriate analysis, the EIR appropriately concludes that potential adverse impacts to wildlife will be reduced to a less than significant level with feasible mitigation incorporated (Draft EIR, Section 5.7, Biological Resources, pages 5.7-142 to -155). Further, the Project has been designed to promote regional "smart growth" planning principles established by the Southern California Association of Governments' (SCAG) 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy and the County's Antelope Valley Area Plan (AVAP) for the purpose of accommodating regional growth projections in a sustainable manner that reduces criteria air pollutant and greenhouse gas emissions and promotes public health while protecting regional open space, Sensitive Ecological Areas and agricultural areas consistent with the AVAP's Rural Preservation Strategy. See Final EIR, response to Comment F.8-20 for further discussion.

ADD-F.11

SAVE OUR RURAL TOWN

Jodie Sackett
County of Los Angeles
Department of Regional Planning
320 West Temple Street, Room 1348
Los Angeles, CA 90012

July 9, 2018

Subject: Traffic Impacts of the proposed Centennial Project.

Reference: Project No. 02-232, Specific Plan No. 02-232, Zone Change Case No. 02-232, General Plan Amendment No. 02-232, Conditional Use Permit No. 02-232, Development Agreement No. RPPL2016003940, Vesting Tentative Parcel Map No. 060022, Environmental Assessment No. 02-232

Dear Mr. Sackett;

Save Our Rural Town ("SORT") respectfully submits the following comments regarding traffic impacts generated by the referenced Centennial Project; these comments were derived from the project Staff Report, adopted planning documents, and the technical studies obtained from the Centennial Project Environmental Impact Report ("EIR") prepared pursuant to the California Environmental Quality Act ("CEQA"). ADD-F.11-1

The "Staff Analysis" report dated May 24, 2018 initially states that traffic impacts of the Centennial Project will be less than significant [page 14 of 34]. Subsequently, it admits that Centennial Project traffic impacts *will be* significant if the California Department of Transportation ("CalTrans") does not complete certain highway improvements (namely, the "Northwest Corridor" Project along SR-138). Then, the report vaguely dismisses these significant traffic concerns by simply declaring that, as "Lead Agency", the County cannot "mandate" the necessary mitigation because it has no "jurisdiction" over the 138 Corridor. According to this circular argument, it is CalTrans' responsibility to mitigate the traffic impacts of County-approved land use projects, and because the County has no jurisdiction over CalTrans, the County is apparently free to approve land-use projects *with impunity* and *regardless of the traffic impacts that such projects create*. This argument turns CEQA on its head because it absolves the County of its statutory obligation as Lead Agency to mitigate significant impacts to the greatest extent feasible by simply throwing the mitigation responsibilities onto the shoulders of some other agency. ***That is not how CEQA works;*** it is the County that is the Lead Agency and it is the County that is approving the Centennial project, so it is the County (and only the County) that bears the burden of conditioning the project to reduce significant impacts to the greatest extent feasible. ADD-F.11-2

CEQA requires the Lead Agency to condition a project in a manner that reduces significant impacts and still achieves most of the project objectives [CEQA Statute § 21002]; the only way that the County can reject project conditions or mitigation measures that achieve the project objectives and reduce significant impacts is if there are social, economic, or other factors that render such measures infeasible. CEQA does not permit the Lead Agency to ignore feasible conditions or mitigation measures *especially if all the project objectives are achieved even with the imposition of such conditions or mitigation measures.* In the case of the Centennial Project, the Project Objectives enumerated in the FEIR are set forth on page 4-4 as:

1. Implement the Antelope Valley Area Plan (AVAP) by creating an environmentally and economically sustainable master-planned community on the Project site to help accommodate planned regional population and economic growth within the West EOA.

2. Design the Project to maximize efficient utilization of regional infrastructure while preserving hundreds of thousands of acres of contiguous natural open space and important biological resources.

3. Size the Project to include a broad range of employment, residential, institutional, and recreational land uses to encourage walkability and wellness, while reducing off-site employment-related commuter trips.

4. Ensure that all Project site infrastructure and public services are funded by the Project to avoid creating any financial obligations on existing residents and other taxpayers.

5. Integrate a multi-modal transportation network, renewable energy, water conservation, community wellness, and other green development features into the Project's design, build out, and ongoing operations.

ADD-F.11-3

SORT notes that the first objective encompasses the AVAP (which is the fundamental guidance document for Antelope Valley development through 2035). Because the Centennial Project Objectives intrinsically embrace the long-term perspective of the AVAP, the Centennial Project itself must be implemented in a manner that is consistent with the AVAP's long-term perspective. So, if the record reveals that there are feasible conditions or mitigation measures *that can be imposed by the County* and which eliminate all significant traffic impacts while contemporaneously achieving all the Centennial Project Objectives, then ***the County is obligated by CEQA to adopt such conditions or mitigation measures***. With this foundation established, the next step is to review the project record and identify element(s) that support feasible conditions/mitigation measures which lie within the County's jurisdiction and will reduce traffic impacts to "less than significant". Toward this end, SORT notes the following record elements:

- The Centennial Project will be phased in over a 20-year time frame [EIR 4-92].

- The Centennial Project Applicant has identified 10 project "phases" [EIR 4-91].

ADD-F.11-4

- The EIR acknowledges that the "phases" can be implemented with services and infrastructure (schools, roadways, parks, utilities, etc.) that are sufficient to serve the increased number of residents and occupants that each "phase" is designed to accommodate. [EIR 4-92].

- It is CalTrans' objective to operate its road facilities at a "Level of Service" ("LOS") of "C" or better, and therefore determines facility "need" when the LOS degrades to "D" [CalTrans Northwest 138 Corridor Improvement Project Transportation Analysis Report – Page 19].

- CalTrans projects that the LOS along the 138 Corridor east of the Centennial Project will degrade to "D" by 2020 [CalTrans Northwest 138 Corridor Improvement Project Transportation Analysis Report Appendix I].

- The Supplemental Traffic Study prepared for the Centennial Project (dated November, 2017 and included in Appendix 5.10C of the FEIR) reports that no significant traffic impacts on the existing 138 Corridor are created by the Centennial Project at a 10% completion rate [Section 3-2].

- The Supplemental Traffic Study reports that construction of more than 10% of the Centennial Project will create significant adverse traffic impacts on existing 138 Corridor facilities, but these impacts will be reduced to "less than significant" with implementation of the "Northwest Corridor Project"(specifically, Alternative 2) that CalTrans is processing [Section 3-3 of Appendix 5.10C of the FEIR].

- The Supplemental Traffic Study reports that 100% construction of the Centennial Project (i.e. "full build out") will create significant adverse traffic impacts even after CalTrans completes the "Northwest Corridor Project" but these impacts can be reduced to less than significant with additional roadway modifications [Section 3-4 of Appendix 5.10C of the FEIR].

ADD-F.11-4 cont.

Taken together, these material facts provide a solid and indisputable basis for conditioning the Centennial Project in a manner which guarantees that project traffic impacts will be reduced to "less than significant" for the project duration. Specifically, adding the following 3 conditions of approval for the Centennial Project Community Specific Plan, Development Agreement, CUP, Zone Change, General Plan Amendment, and Vesting Tentative Map will achieve this CEQA mandate:

1. Development of residential and non-residential facilities necessary to accommodate up to 10% of Centennial Project "Buildout" is authorized prior to CalTrans' completion of the Northwest 138 Corridor Project. The 10% "buildout" authorized by this condition must be consistent with the facilities contemplated in the traffic analysis results reported in Section 3.2 of the Supplemental Traffic Study provided in Appendix 5.10C of the Final EIR.

ADD-F.11-5

2. Development of residential and non-residential facilities necessary to accommodate between 10% and 75% of Centennial Project "Buildout" is permitted ***after*** CalTrans' completion of the Northwest 138 Corridor Project. The 75% "buildout" authorized by this condition must be consistent with the facilities contemplated in the traffic analysis results reported in Section 3.3 of the Supplemental Traffic Study provided in Appendix 5.10C of the Final EIR.

3. Development of residential and non-residential facilities necessary to accommodate between 75% and 100% of Centennial Project "Buildout" is permitted ***after*** the Centennial Project Applicant has completed all of improvements required to accommodate full "buildout" beyond those which CalTrans intends to construct for the Northwest 138 Corridor Project. These additional improvements must be consistent with the facilities identified in the traffic analysis results reported in Section 2.3 of the Supplemental Traffic Study provided in Appendix 5.10C of the Final EIR.

ADD-F.11-5 cont.

These conditions are feasible because the Centennial Project EIR firmly establishes that the phased development approach that is intrinsic to these conditions is already "baked" into the project [EIR Section 4-6]. Thus, these conditions do not impose any burden or hardship on the Centennial Project applicant. These conditions will allow the County to achieve all the stated project objectives while continually reducing traffic impact impacts to a level that is "less than significant" throughout the duration of the Centennial Project. These feasible and effective conditions are based on solid technical evidence that remains undisputed in the record; therefore, and pursuant to CEQA, the County is obligated to include them as conditions of approval for the Centennial Project.

ADD-F.11-6

SORT further observes that the two traffic studies provided in the EIR (Appendices 5-10A and 5-10C) presume that Margalo Drive, Three Points Road, 230th West, 170th West, 90th West and 30th West will be configured for access to SR138. These assumptions are not supported by CalTrans' Northwest Corridor Program because CalTrans has not yet determined the final access locations for the Northwest Corridor Project [FEIR Appendix 5.10-A at 4.61]. More importantly, these presumptions are utterly contrary to the adopted AVAP. Specifically, the AVAP establishes that development of the Northwest Corridor Project will significantly impact land use patterns in the Antelope Valley [LU-13] and, if not properly planned, will conflict with the rural preservation priorities established by the AVAP [Ibid]. Correspondingly, the AVAP carefully sets forth the key intersections along the Northwest Corridor Project where access to the 138 can be provided without adversely affecting established rural communities. The Northwest Corridor intersections that are identified by the AVAP outside the Centennial Project Boundary are 60th W, 110thW, 190thW, and 245thW [see Appendix B of the Traffic Study prepared for the AVAP and included in EIR Appendix K].

ADD-F.11-7

It is vital to the preservation of established rural areas (including Antelope Acres, Three Points, Green Valley, Leona Valley, and the Lakes and Valleys Communities) that direct access to SR-138 via the Northwest Corridor Project be limited to the specific intersection points identified in the AVAP. It is also essential that these facts be clearly set forth in the Centennial Project record; therefore, SORT respectfully requests that the County include a

ADD-F.11-8

finding in the Centennial Project Approval which states that Northwest Corridor access at Margalo Drive, Three Points Road, 230th West, 170th West, 90th West and 30th West are contrary to the adopted AV Area Plan and are therefore neither approved nor sanctioned pursuant to any entitlement granted to the Centennial Project.

ADD-F.11-8 cont.

If you have any questions or would like to discuss these issues, please do not hesitate to contact me at airspecial@aol.com,

Sincerely,

/S/Jacqueline Ayer
Jacqueline Ayer
Director, Save Our Rural Town

Response to Comment Letter ADD-F.11
Save Our Rural Town
July 9, 2018

Response to Comment ADD-F.11-1:

Thank you for your participation in this public process. These comments will be provided to the Regional Planning Commission and Board of Supervisors for consideration. This introductory comment does not specifically address the adequacy of the EIR, and no further response is required.

Response to Comment ADD-F.11-2:

The Commenter's concern regarding EIR analysis and staff report discussion of traffic-related impacts is noted and will be provided to the Regional Planning Commission and Board of Supervisors for consideration. However, the EIR analysis is consistent with CEQA requirements, and the Commenter misstates CEQA requirements and the County's responsibility.

As explained in Draft EIR, Section 5.10, Traffic, Access, and Circulation, under Thresholds 10-1 and 10-2, in accordance with the MMRP at MMs 10-3 and 10-4, the Project must provide the required funding for the implementation of all identified roadway and highway improvements necessary to reduce Project-related impacts to a less than significant level, either through an agreement with Caltrans (referred to as the Traffic Mitigation Agreement) or by contributing fair share funding for these improvements. (Final EIR, Appendix 2.0-C.Rev) If built, improvements identified in the MMRP would fully mitigate all potential Project-related significant impacts to SR-138 and other state highways. In each case, the MMRP specifically requires that Project funding be provided either in accordance with the agreement with Caltrans and in accordance with timing set forth in that agreement, or prior to final map recordation. Consequently, all of the Draft EIR mitigation measures calling for highway facility improvements required to address potential Project-related significant impacts are fully enforceable and must be completed before each phase of development may occur.

However, Caltrans is legally responsible for implementing planned improvements of State facilities, and the Project Applicant and the County do not have the authority to require that Caltrans do so. For this reason, the EIR concludes that if improvements are not implemented, the Project would contribute to significant and unavoidable impacts. (Draft EIR, Section 5.10, pages 5.10-1, -2, -130.) The County as lead agency can commit to and enforce feasible mitigation measures that are within its responsibility and jurisdiction. However, because the County does not have the authority to require Caltrans to implement planned improvements of State facilities, the County in its CEQA findings may properly find that those measures are within the responsibility and jurisdiction of another agency, and that such measures can and should be adopted by such other agency. See CEQA Guidelines § 15091(a)(2); CEQA §21081(a)(2). The May 24, 2018 Staff Report, included in materials for both the June 6, 2018 and July 11, 2018 Regional Planning Commission hearings, accurately reflects this discussion

at page 14. The draft CEQA Findings, included in the staff report for the July 11, 2018 Regional Planning Commission hearing, also accurately reflect EIR analysis and conclusions that under Thresholds 10-1 and 10-2, impacts would be significant and unavoidable if Caltrans does not implement improvements. See Staff Report Attachment G, Draft CEQA Findings Regarding the Centennial Specific Plan Project and EIR.[3346]

Response to Comment ADD-F.11-3:

The Commenter provides a summary of CEQA § 21002, which specifies in relevant part that "…public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects…". Further, "…in the event specific economic, social, or other conditions make infeasible such project alternatives or such mitigation measures, individual projects may be approved in spite of one or more significant effects thereof." The Commenter correctly identifies the Project objectives. The implication of this comment is that the EIR improperly rejects "project conditions or mitigation measures," but this comment does not specify any such condition or mitigation measure. To the extent that this comment is intended as an introduction to Comments ADD-F.11-4 through ADD-F.11-8, please refer to responses to Comments ADD-F.11-4 through ADD-F.11-8. Since this comment does not specifically address the adequacy of the EIR, no further response is required.

Response to Comment ADD-F.11-4:

The Commenter accurately summarizes content of Centennial Project and Northwest 138 Improvement Project documents. With regard to the identification and incorporation of feasible mitigation measures, Public Resources Code § 21100(b)(3) requires the EIR set forth feasible mitigation measures to minimize significant environmental effects of the Project. The EIR has done this for traffic-related impacts, including with regard to SR 138 capacity. See responses to Comments ADD-F.11-2 and ADD-F.11-5 for further details. This comment does not specifically address the adequacy of the EIR, and no further response is required.

Response to Comment ADD-F.11-5:

The conditions suggested by the Commenter are not necessary, because mitigation requirements in the Project's Draft EIR, Mitigation Monitoring and Reporting Program ("MMRP"), and Specific Plan implementation requirements together ensure equivalent safeguards against the possibility of Project development occurring without mitigation of potential impacts through implementation of appropriate improvements. Because the EIR/EIS for SR-138 has been approved, and these improvements are included in the Regional Transportation Plan/Sustainable Communities Strategy, it is reasonably foreseeable that these improvements will be timely constructed to serve the region's transportation needs, which exist independent of the project as discussed in response to Comment ADD-F.10-5. SR-138 improvements that are specific to the Centennial Project, such as the access points to the Project site, are required to be constructed by the Developer/Applicant. The project is also required to monitor and report on traffic conditions. Mitigation Measure 10-2

[3346] Available at: http://planning.lacounty.gov/case/view/specific_plan_no_02_232_centennial_specific_plan.

specifically requires that the Applicant "submit a traffic study that addresses site access and local circulation in accordance with the County of Los Angeles Department of Public Works Traffic Impact Analysis Report Guidelines. The Project Applicant/Developer shall retain a Traffic Engineer or Civil Engineer licensed in the State of California to perform the traffic study to the satisfaction of the County." (Final EIR, Appendix 2.0-C.Rev, page C-87.) This requirement applies, per the MMRP, "Prior to approval of Tentative Maps." (*Ibid.*) This monitoring and review process also allows for updated traffic counts, which are expected to continue to evolve based on a wide variety of evolving transportation technologies and services (e.g., app-based ride sharing) and workplace patterns (e.g., home-work and WeWork remote work options that reduce peak hour as well as overall commuter trips). In the unlikely scenario that the SR-138 improvements are delayed and unavailable to serve new project demand, approval of the next discretionary approval for the project (e.g., the tentative tract map) could be delayed until such time as adequate traffic capacity on SR-138 exists. Or, the County may condition the map approval on the construction of the needed improvements or deny the tentative tract map. Further, MM 10-21 specifically requires funding of improvements to accommodate up to 10 percent of Project buildout and anticipated cumulative development, MM 10-22 requires funding improvements to accommodate up to 75 percent of Project buildout and anticipated cumulative development, and MM 10-23 requires funding improvements to accommodate up to 100 percent of Project buildout and anticipated cumulative development.

While the County cannot require Caltrans to implement improvements (as explained in response to Comment ADD-F.11-2), the Specific Plan and subdivision mapping processes further ensure that Project development would not occur without all necessary infrastructure and improvements. Tentative Tract Map applications are discretionary actions subject to CEQA compliance requirements per Specific Plan Sections 4.5.3 and Specific Plan Appendix 3-B, and per CEQA § 21080(a)–this means development of each portion of the Project contemplated in each subdivision map will require further environmental review and approval from the County to ensure appropriate roadway and freeway infrastructure improvements are implemented prior to development and to ensure impacts are reduced to a less than significant level to the greatest extent feasible.

Response to Comment ADD-F.11-6:

The conditions suggested by the Commenter are not necessary and not required under CEQA, because mitigation requirements in the Project's Draft EIR, Mitigation Monitoring and Reporting Program, and Specific Plan implementation requirements, together ensure equivalent safeguards against the possibility of Project development occurring without mitigation of potential impacts through implementation of appropriate improvements. See responses to Comments ADD-F.11-2 and ADD-F.11-5 for further details.

Response to Comment ADD-F.11-7:

Contrary to this comment's assertion, the Centennial Traffic Study dated May 2017 (Draft EIR Appendix 5.10A) assumes access points along SR-138 consistent with the AVAP. The May 2017 traffic study was prepared using the same version of the traffic model as was used by

the County for preparation of the AVAP traffic study. The traffic study specifically assumes the following roadways would have access to SR-138: 60th Street West, 110th Street West, 190th Street West, and 245th Street West. The Centennial Supplemental Traffic Study dated November 2017 (Final EIR Appendix 5.10-C) was prepared after Caltrans selected a preferred alternative for the Northwest 138 Corridor Project. The November 2017 traffic study is consistent with the SR-138 access points as defined in Caltrans' preferred alternative.

The AVAP identifies three Economic Opportunity Areas (EOAs), which are defined as areas where major infrastructure projects are being planned by state and regional agencies, which would bring tremendous opportunities for growth and economic development in the vicinity of these projects (AVAP at p. LU-8). The Centennial Project is located entirely within the area specified in the AVAP as the West EOA. As stated in the AVAP, to minimize potential Antelope Valley land use conflicts with the Northwest 138 Corridor Project, a comprehensive study of each of the AVAP's three Economic Opportunity Areas (EOAs) should be undertaken through a community planning process that balances the need for economic development and local employment with rural preservation and environmental priorities. (AVAP at p. LU-13). The Centennial Specific Plan and Centennial EIR are mechanisms pursuant to which the County is implementing the comprehensive community planning processes anticipated by the AVAP. As explained in Final EIR, response to Comment F.8-20, the Centennial Project is consistent with the AVAP and its land use plan.

Response to Comment ADD-F.11-8:

The County is aware that the Caltrans preferred alternative for the Northwest 138 Corridor Project includes recommendations for roadway access to SR-138 that differs from the AVAP. As noted in response to Comment ADD-F.11-7 above, the Centennial EIR includes analysis consistent with the AVAP assumptions as well as the access points specified in the Caltrans preferred alternative. State Route 138 is under the jurisdiction of Caltrans, not the County, and the County does not have the legal authority to determine or limit access points along SR-138 in the vicinity of the Project site, as this comment recommends.

Moreover, the AVAP does not require that SR-138 access points be sited at any particular location, as this comment mistakenly suggests. Rather, the AVAP expressly provides, "[a]s more details are finalized with … the Northwest 138 Corridor Improvement projects (i.e., route alignments, location of on-ramps, number of lanes, etc.), further planning activities may be necessary for each EOA to ensure that the Area Plan's Goals and Policies, as well as Land Use Policy and zoning are consistent with the final design of the … project[]" (AVAP at p. IMP-3). Caltrans did not select its preferred alternative alignment for the Northwest Corridor 138 Project until after the AVAP was adopted and the Draft EIR was circulated for public review. As contemplated by the AVAP language quoted above, as part of the Centennial Specific Plan EIR, the County prepared the November 2017 Supplemental Traffic Study (STS) to analyze the Project's potential traffic impacts consistent with the SR-138 access points ultimately selected by Caltrans to be its preferred alternative (see Draft EIR Appendix 5.19-C).

The STS evaluates potential impacts using the Highway Capacity Manual (HCM) methodology and the North County Sub-Area Model utilized in the NW SR-138 Final EIR/EIS as updated by Los Angeles County to reflect the AVAP approved by the County in June 2015. The STS determined that the implementation of Caltrans' preferred SR-138 alignment, and additional improvements to SR-138 that may be required under cumulative conditions with full Project buildout, will not result in any new or more severe significant physical construction and operational impacts than considered in the NW SR-138 Final EIR/EIS and the Project Draft EIR. The STS also demonstrates that, using the HCM methodology, the Project will not result in any new or more severe significant impacts to applicable highway segments, intersections and ramps than considered in the Project Draft EIR.

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From: Nick Jensen <njensen@cnps.org>
Sent: Tuesday, July 10, 2018 11:44 AM
To: Rosie Ruiz; Jodie Sackett
Subject: Tejon Ranch Blacklist Article

Dear Ms. Ruiz and Mr. Sackett,

Thank you very much for your careful attention to the Centennial Specific Plan. The California Native Plant Society opposes Centennial for reasons that we have detailed in published articles and our comments submitted in response to the DEIR and FEIR. ADD-F.12-1

Recently, the Mountain Enterprise published a story that explores a new tactic being employed Tejon Ranch Company to ban individuals and organizations from accessing the ranch.

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I am attaching a complete pdf version of the article, and the associated editorial and letter to the editor for your review. ADD-F.12-2

I hope that this article helps to elucidate Tejon Ranch Company's misguided attitudes toward science, free speech, and public access to this very special location in Los Angeles County. Please make this article available to the Regional Planning Commission ahead of tomorrow's hearing. ADD-F.12-3

Thank you very much for your time. Feel free to contact me with any questions.

Sincerely,
Nick

--
Nick Jensen, PhD
Southern California Conservation Analyst
California Native Plant Society
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Claremont, CA 91711
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(530) 368-7839

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The Mountain Enterprise

July 6, 2018

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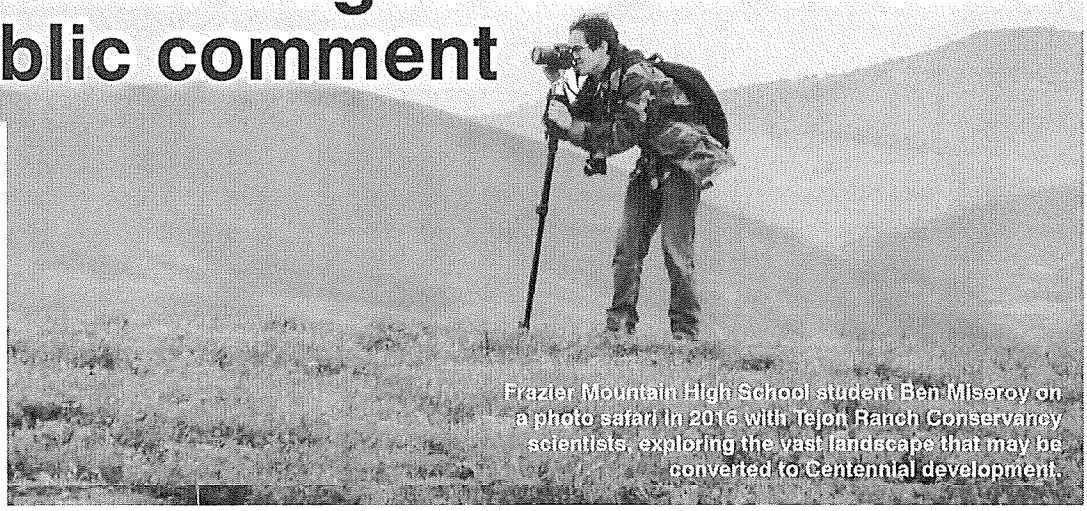
THE BLACKLIST:

Tejon Ranch wages war on science and public comment



Patric Hedlund photo

Frazier Mountain High School student Ben Miseroy on a photo safari in 2016 with Tejon Ranch Conservancy scientists, exploring the vast landscape that may be converted to Centennial development.

By Patric Hedlund, *TME*

The phone rang the day after Kathleen Weinstein of the Pine Mountain community returned from a magical trip to Spain and France with her husband, Mel. They had reserved tickets for an event on July 1 at the Tejon Ranch Conservancy. It involved a challenging hike—a good opportunity to work off some of those delicious Parisian pastries.

The call was from an acquaintance who works for the Conservancy. As a couple, the Weinsteins had been discussing donating money to the nonprofit Tejon Ranch Conservancy.

But what she heard in the phone call last Thursday was a shock. Her friend told her that the Tejon Ranch Company would not allow her on the ranch property because "she said negative things about the ranch."

Weinstein searched her mind to think what the caller could be talking about.

Then it came to her.

She had participated in the comment phase of the California Environmental Quality Act (CEQA) process for the Tejon Ranch Centennial project. CEQA mandates that the public be invited to submit comments, questions and concerns about proposed land developments, so all impacts of a proposed project are examined thoroughly before permits for building are granted.

Public Health Concerns

Weinstein had joined in an analysis of the Centennial Environmental Impact Report (EIR) with the TriCounty Watchdogs, a citizens' group that asked questions about issues such as valley fever risks to residents and construction workers, and about adequate long-term water supplies for Centennial's proposed 19,333 new homes (a possible 50,000 to 70,000 new people), surrounded by industrial parks and commercial developments between Gorman and Neenach.

Asking these questions is what appears to have gotten Kathleen Weinstein, a retired nurse with concerns about public health, banned from the Tejon Ranch Conservancy.

Lucinda McDade, Executive Director of Rancho Santa Ana Botanic Garden (RSABG) was contacted Saturday to ask if she'd heard of a Tejon Ranch blacklist. She replied, "I was indirectly informed that [the Botanic Garden] was on the 'banned' list by my colleague, Travis Columbus."

The Eriogonum Society

"Travis was planning to take a field trip to Tejon Ranch with a group of people who are serious enthusiasts of buckwheats (there are many native California species and a very cool one on the Ranch —genus *Eriogonum*). [He] was informed—not very many days before the trip—that The Eriogonum Society is banned due to its affiliation with California Native Plant Society and [us]."

The Blacklist Gag Order

The Mountain Enterprise has now acquired records that appear to reveal a blacklist, part of a systematic attempt to gag citizens and send a message to scientists to keep them from participating in the CEQA comment process regarding Centennial. The Nixon-style "enemies list" is coming from Tejon Ranch Company management, and is being conveyed through orders given to Tejon Ranch Conservancy scientists.

McDade wrote to the Conservancy: "I'd like to protest Rancho Santa Ana Botanic Garden's inclusion on this list. RSABG is most emphatically not an advocacy group. We have taken no position on the [Centennial] project nor will we take one. We research, document, learn and teach; we do not advocate," the executive director wrote.

Her own words make it very clear that there is an intentional chilling effect in Tejon Ranch's message to the very scientists who are most knowledgeable about Tejon Ranch's natural resources: "Don't speak up. Don't share scientific information with Los Angeles County. Stay silent...or else...."

California Native Plant Society

"This McCarthy-like witch-hunt [tactic] of blacklisting individuals started in June, as far as I know," said Nick Jensen, Ph.D., Conservation Analyst for CNPS. Jensen says he loves Tejon Ranch and has been helping with scientific research projects for the Conservancy for several years.

The Tejon Ranch side of the Western Antelope Valley habitat still supports wild antelope, grazing on rare grasses and that unique Tehachapi buckwheat (*Eriogonum callistum*).

Jensen is also a member of the California Native Plant Society (CNPS). He has volunteered to lead public tours of the Conservancy as a docent. A partial title of his doctoral thesis is "A floristic study of Tejon Ranch...."

The CNPS is a group of professional botanists and

Continued on page 3

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THE BLACKLIST:

Tejon Ranch wages war on science and public comment

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California native plant enthusiasts. The group joined in to analyze the impact of the Centennial project on the heritage grasslands of the Western Antelope Valley. Their partner in developing that analysis is the Center for Biological Diversity (CBD).

CBD was one of the environmental groups approached over 11 years ago by Tejon Ranch's former management to negotiate the secret 2008 "Big Green" truce. CBD decided it was not wise to keep so much from the public, so it refused to sign the second round of confidentiality agreements and withdrew as a party to the negotiations.

In the years since, the Center for Biological Diversity has filed lawsuits against Tejon Ranch Company, challenging the state's transfer of public assets to private gain with the Kern Water Bank, for instance.

The 2008 accord between the Tejon Ranch Company and the Big Greens—Sierra Club, Audubon California, the Planning and Conservation League, the Natural Resources Defense Council, and the Endangered Habitats League—gave birth to the Tejon Ranch Conservancy. It was applauded by former Governor Schwarzenegger and former Tejon Ranch CEO Bob Stine as a breakthrough win-win partnership between developers and environmentalists.

A full 240,000 acres of Tejon Ranch land was to be under Conservancy management for study and preservation. The public was told the Conservancy would be an independent, science-driven research and preservation group.

That was the public relations spin that brought Tejon Ranch's stockholders into position to receive a passthrough of $15.8 million in public taxpayer funds from California's Wildlife Conservation Board in 2010. The WCB distributes state funds for wildlife habitat acquisition. It gave the money to the Conservancy, which passed it to Tejon Ranch Company, to preserve 62,000 acres for wildlife corridors between habitat islands managed by the Conservancy.

Science is the foundation of all our efforts.... Only through research, monitoring, and adapting our conservation management based on new findings will we fully understand Tejon Ranch's natural resources and how best to protect, enhance, and restore them.

—Tejon Ranch Conservancy website

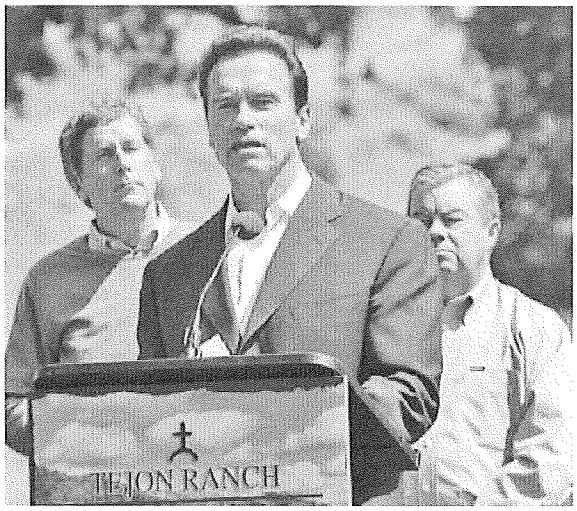
In addition to money, the developers got the promise that their Big Green partners would stand mute through the CEQA call for comments for Tejon Mountain Village, the Grapevine development and Centennial.

Those groups are carefully complying with their end of the deal. But under Tejon Ranch's current CEO, Greg Bielli, the corporation now appears to have little patience with the fact that other concerned citizens and scientific groups are not obligated to comply with the same "no comment" pact as the Big Greens.

Public access was linked to the taxpayers' $15.8 million. Yet Conservancy scientists and public access personnel are now ordered to ban people from access if they submit a negative comment on Centennial.

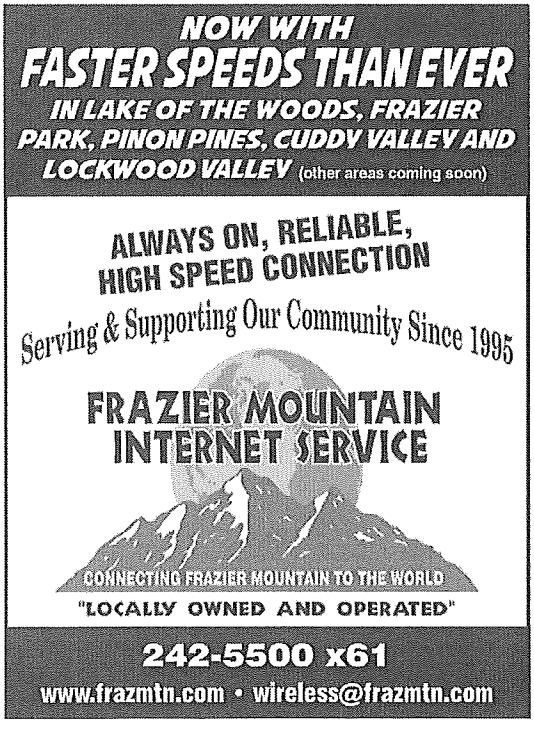
Conservancy President and CEO Bob Reid said he follows Tejon Ranch employees' orders about access to Conservancy lands and events. On June 21, 2018 at 9:22 a.m. Antone "Tony"

Continued on page 6



Gary Meyer photo

Former Governor Arnold Schwarzenegger (with Natural Resources Defense Council's Joel Reynolds and Tejon Ranch CEO Robert Stine) spoke at the press conference in 2008 to mark the "Big Green" and Tejon Ranch Company accord. Tejon Ranch Conservancy was introduced as an independent nonprofit. The Governor helped Tejon Ranch obtain the Wildlife Conservation Board payout of $15.8 million in taxpayer funds.



THE BLACKLIST: :

Tejon Ranch wages war on science and public comment

Continued from page 3

Mattias—Natural Resources and Stewardship Liaison for Tejon Ranch Company—sent an email to Tim Bulone, on the Conservancy support staff. It was about an access request for visitors coming to the Conservancy for dinner and a tour. The email string tells the tale.

Greetings: You Are Banned

Subject: Lucy Clark / Clyde Golden. The message: "Tim, I would suggest that you look up the current CNPS [*California Native Plant Society*] – Kern Chapter website for Members and Contacts. Both folks are listed."

Mike Campeau, Vice President of Tejon Ranch Operations, was copied in on the note. He is also a member of the Tejon Ranch Conservancy Board of Directors.

At 9:49 a.m. he wrote: "Tim, You will need to inform Lucy Clark and Clyde Golden that due to their association with CNPS they will not be able to attend the dinner or the tour."

At 9:53 a.m. Tim Bulone cc'd this note to Bob Reid.

At 10:20 a.m. Bob Reid wrote: "Dear Lucy and Clyde, Unfortunately the Tejon Ranch Company has denied an access permit (their email below) for your attendance at the upcoming Ranch Round Up and Tour, due to your affiliation with CNPS.

"Our apologies for any inconvenience. Please feel free to call me if you would like to discuss." He signed it, Bob Reid, President and CEO, Tejon Ranch Conservancy.

Access Permits

In an interview this week, Reid explained, "Tejon Ranch Company is the landowner and controls the access permit process. The Conservancy has to get an access permit for anyone who comes on the property. If access is denied by Tejon Ranch Company, it is out of the Conservancy's hands. This is part of the overall ranch-wide agreement, which provides for requests for access permits."

Seeking Comment

We contacted Tony Mattias for a comment about banning people from Conservancy events because of being associated with a CEQA comment on Centennial.

"You need to talk to Barry Zoeller, of Tejon Ranch Public Relations," he said, then hung up. Barry Zoeller's voice-mail said he is on vacation this week. The receptionist said no one is covering the post in his absence.

We left a voice message and sent emails for Mike Campeau, Zoeller, Mattias and Tejon Ranch CEO Greg Bielli. We also called Bielli's office and left a message on his administrative assistant's voicemail—all during the early part of the business day on Tuesday.

Parameters

In the interview, Reid explained that the Tejon Ranch Conservancy board has 12 members—four appointed by Tejon Ranch Company, four appointed by the five original "Big Green" Resource groups and four independent board members, selected by the board at large—"and to my knowledge, the current independent board members do not have any connection to Tejon Ranch," the Conservancy CEO said.

Is Reid uncomfortable with the notion of banning scientists and members of the public based on participation in the Centennial CEQA process?

"I have no comment," Reid replied. "That is between Tejon Ranch Company and the individual they are questioning. We are never involved in the CEQA or permitting. That is at arm's length.... It is part of our arrangement we have in place with the ranch. We have no opinion on the issue."

Does he feel that the scientific credibility of the Conservancy, plus access to research grants, may be compromised if the only scientists that are allowed to come on the land are those willing to report only what Tejon Ranch wants to hear?

Bob Reid seemed comfortable saying again that he can't comment. He repeated, "We have an access process with the landowner. We don't have any authority to question that. I really can't say anything more than that. These are parameters we work within."

Banning Talk of Research

Nick Jensen sees it this way: "TRC is trying to take these punitive actions against anybody who is tangentially associated with anybody who is opposing the development.

"It is private land, but Tejon Ranch did enter into a conservation agreement that has a provision to ensure public access to the land that is conserved. To ban people based on their speaking publicly about the results of their research... well, if it is not illegal, it is against the spirit of the agreement and it is a slap in the face to the public" [which paid the $15.8 million for accesss and wildlife easements].

Don't Share With County

Because the California Native Plant Society shared botanical research information with the Center for Biological Diversity, and co-signed a letter submitted to Los Angeles County during the CEQA Environmental Impact Report comment period, it appears that members of the CNPS and even people who have worked with them as part of other, separate, organizations (such as the Rancho Santa Ana Botanic Garden) are now being "disinvited" from Conservancy events and banned from Tejon Ranch land—even those areas that the taxpayers of California paid $15.8 million to Tejon Ranch Company to establish, Jensen summarized.

Tejon Ranch Company Is Not Local Anymore

Dan Gluesenkamp, Executive Director for the California Native Plant Society, was just sitting down at a restaurant with his wife and children Monday when we reached him.

We asked about the spreading reports of a blacklist created by Tejon Ranch executives.

We also asked about the practice of ordering Conservancy staff, including its CEO, to drop a bomb on Conservancy donors and scientific colleagues by telling them they are being banned from Conservancy activities if they express any contrary opinion about the wisdom of Tejon Ranch's Centennial Project.

As his family ordered lunch, Gluesenkamp didn't have time to mince words.

"Tejon Ranch Corporation is not local anymore," he said. "The California Native Plant Society has had some concerns about Tejon Ranch Company projects and has tried to work with them to improve the projects.

"We could do that with the old management. They shared our values. We could work things out with them.

"But the people who are in charge now are pretty ruthless. They are not Californians. They do not share our values. They do not want to work things through.

"Blacklist? Congratulations. You are on to something there."

Tejon Ranch Company did not return our calls and emails before we went to press. When they do, we will follow up with their comments.

TEJON

For years this logo—splashed on signs, walls, shirts, burlap gift bags and wine glasses—was accompanied by the slogan: 'Preserving California's Legacy.' Those days are gone. As if to say, 'Let the buldozers roll!,' the slogan has been changed. The new slogan: 'Building California's Legacy.'

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Is First Amendment Obsolete in Tejon Ranch's Piece of California? *There should be consequences for undermining the CEQA process*

Tejon Ranch's logo is often accompanied by the claim that the company is "Preserving California's Legacy." Apparently, Tejon's version of California's legacy does not include the First Amendment to the United States Constitution.

As Fourth of July flags were flying this week and the nation was celebrating the birthday of its Declaration of Independence from the oppression of Britain's King George III, *The Mountain Enterprise* was astonished to acquire a list with names of scientists who have been banned by order of Tejon's corporate executives from engaging in scientific research on lands under management of the allegedly independent Tejon Ranch Conservancy.

The legal comment process required by the California Environmental Quality Act (CEQA) appears to be under attack by Tejon Ranch Company. It is seeking to suppress public participation in the CEQA comment protocol.

Let us hope that the L.A. County Regional Planning Commissioners still believe in these ideals of our democracy, and that they will not be manipulated by Tejon Ranch Company's cynical tactics.

In addition, the spirit of the 2008 accord that created an independent Tejon Ranch Conservancy is being violated by heavy-handed bully tactics employed by the executives and the board of Tejon Ranch Company.

Conservancy scientists who had been promised that they are part of an independent, nonprofit organization with a mission to focus on research, learning and conservation are instead being enlisted as henchmen by the developer to suppress freedom of scientific research and freedom of association. They are being converted into enforcers of the Tejon Ranch blacklist.

Some say "the suits are afraid that scientists are going to find another endangered species when they are out there" [on ranch lands]. It appears now that the most vulnerable endangered species on Tejon Ranch these days are old-fashioned American traditions of free speech and due process.

The Tejon Ranch Company is acting to suppress free exchange of information among scientists and to impede public policymakers from receiving all the facts before adopting Centennial's Final Environmental Impact Report.

TRC's manipulation of the CEQA process is in effect lying to the Los Angeles County Regional Planning Commissioners.

By sending out a threat to all young scientists that they must not speak up or their future careers will be damaged by vengeful corporate overlords, Tejon Ranch Company is seeking to suppress public comments. It is hoping to deny full-spectrum information from reaching the commissioners charged with making informed public policy choices. The damage being done to the credibility of the Tejon Ranch Conservancy in the process is stunning.

A theory now circulating among those watching Tejon Ranch Company is that they plan to line up their entitlement portfolio for Grapevine's 12,000 homes; for the 3,450 Tejon Mountain Village homes (plus resort hotels and commercial areas); and for Centennial's 19,333 homes (with commercial and industrial zones) to sell the entire property — all the acreage with all the value-added entitlements — to deep-pocket foreign investors from Bahrain, Saudi Arabia or China.

The underlying theory of our democracy celebrated this 4th of July is that free speech leads to free and open debate and that in open exchange of information the best ideas will rise to the top.

Let's hope that L.A.'s planning commissioners still believe in these ideals of our democracy, and that they will not be manipulated by Tejon Ranch Company's cynical tactics.

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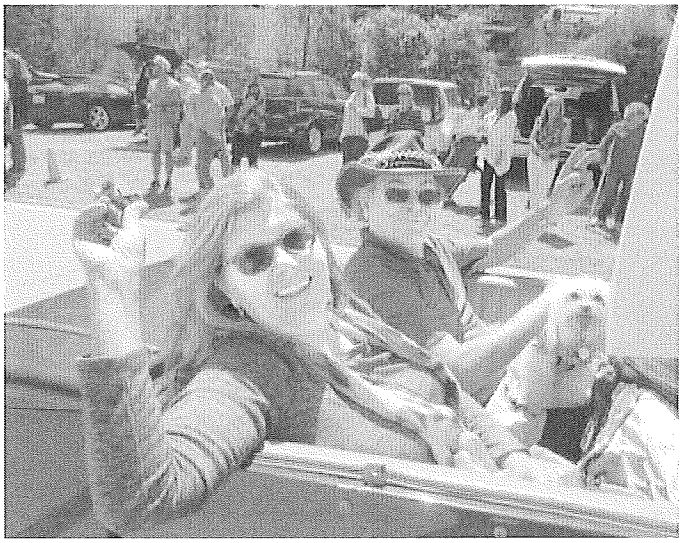
Recipe for Getting Blacklisted



Patric Hedlund photo

Kathleen and Mel Weinstein (along with their furry family member, Reggie) were named the Grand Marshals of the 2018 Lilac Festival Parade for their extraordinary devotion to the Mountain Community. Mel was named Humanitarian of the Year in 2017 by Jizo Peace Center.

July 2, 2018
Dear Editor:

I love Tejon Ranch. It is a unique part of California, a very special place.

I also love America. I especially love my right to free speech.

In responding to the Centennial Environmental Impact Report, I offended the Tejon Ranch Company. I went on public record against the proposed Centennial plan. I expressed my opinion, based on my own experience of living here and research into TRC's plans. The Centennial Project is a bad idea for our communities, in my opinion.

But here is the kicker. I was told over the telephone I was not allowed to go on a Tejon Ranch Conservancy event on Sunday, July 1.

I was told by the Conservancy that TRC would not permit me on ranch property because I made negative comments about the ranch's development plans.

I wasn't told who at TRC made that decision, or what my negative comment was.

While I was disappointed about missing an opportunity to be on the ranch, I was chilled by the implications that I was somehow "blacklisted" because I spoke out against something in an EIR comment.

Is this where we are going in America? Does my solicited opinion threaten the Tejon Ranch Company to the point of retaliation? This is what concerns me most.

Kathleen Weinstein
Pine Mountain community

Wonderful

July 2, 2018
Dear Editor:

Volunteers will be cleaning up Neenach on July 10, 11, 12 and 13 in concert with the Oso (Neenach) Town Council, the Los Angeles County Illegal Dumping Task Force and Rural Protection Services (a nonprofit public benefit corporation).

Volunteers are needed to help load bulky items into a roll-off container, to be located at 22847 West Avenue D (Highway 138) at the Neenach Market and Café. Volunteers will also help clean up creek beds, sensitive ecological areas, roadways and the Ripley Woodland State Park area.

We welcome anyone who can assist us with this community project. Our goal is to clean up illegal dump sites from 190th Street West to 300th Street West.

We will start each morning at 8 a.m. at the Neenach Market. Please bring work gloves, sunscreen, a hat and drinking water. We will tackle illegal dumping along the transitional habitat property at 190th Street West, with illegally dumped construction debris. Several people asked us to clean the creek bed near 245th Street West, all the way up to Avenue A. Volunteers are needed!

Thanks to everyone for their effort to make Neenach a wonderful place to live.

Jeff Zimmerman
Neenach

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Response to Comment Letter ADD-F.12
California Native Plant Society
July 10, 2018

Response to Comment ADD-F.12-1:

Thank you for your participation in this public process. The Commenter's opposition to the Project is noted, and this comment will be provided to the Regional Planning Commission and Board of Supervisors for consideration. This comment does not address the adequacy of the EIR and, therefore, no further response is required.

Response to Comment ADD-F.12-2:

This article is noted, has been provided to the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. This comment does not specifically address the Project or the adequacy of the EIR, and no further response is required under CEQA. However, for informational purposes the County notes that many scientists have been and continue to be allowed access to the ranch per the RWA and RWMP, and thorough, independent scientific review of Tejon Ranch, including the Project site, has been conducted. The Project Applicant also addressed this article in its July 11, 2018 testimony to the Regional Planning Commission, explaining that the RWA does not provide unrestricted public access to Tejon Ranch, but rather provides the express right to withhold access permission. The Applicant further explained that its intention has been to deny access to Center for Biological Diversity and their partner organization, the California Native Plant Society, who have active, ongoing litigation against Kern County, Los Angeles County, and Tejon Ranch regarding Tejon Ranch projects.

Response to Comment ADD-F.12-3:

Please see response to Comment ADD-F.12-2. This comment does not specifically address the Project or adequacy of the EIR, and no further response is required.

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TriCounty Watchdogs

PO Box 6407 Frazier Park, CA 93222

ADD-F.13

10 July 2018

To: Commissioners David W. Louie, Pat Modugno, Elvin W. Moon, Laura Shell, and Doug Smith
Los Angeles County Planning Commission (via Jodie Sackett)

RE: Centennial Project

Dear Commissioners,

I write on behalf of the Tri-County Watchdogs to respond to the FEIR and to bring four particularly urgent issues to your attention. The most urgent issue is **Alternative E**, which was identified as the "environmentally superior alternative" in the CEQA Findings but dismissed as "infeasible." Although I was told on June 6 that it would not be discussed by the Planning Commission, we hope you will change your minds. The second urgent issue is **Valley Fever mitigation**, and the third is **water**. We found the responses to our comments on these issues inadequate. The fourth issue is **TRC's chilling behavior during the CEQA process,** which may have reduced the number of negative comments you have received and forebodes untrustworthy behavior in the mitigation preserve lands. ADD-F.13-1

.

1. As required by law, the Writers of the FEIR (whom I will abbreviate hereafter as WOTF), have identified" an **Environmentally Superior Alternative (Alternative E)** that would achieve the basic project alternatives. Since it appears to be neither impracticable nor ineffective in avoiding significant environmental impacts (the only grounds allowed), there is no legitimate reason to dismiss it. On the contrary, it is imperative that the Planning Commission consider it before making recommendations to the Board of Supervisors.

Despite finding that "Alternative E would result in a reduced grading footprint of approximately 656 acres; would have a corresponding increase in open space; and would meet all the Project Objectives," the WOTF dismiss it on the following puzzling grounds:

> "Since Alternative E would not avoid any of the Project's significant and unavoidable impacts and would increase certain adverse impacts on park resources, and since Alternative E would not extend a planned regional trail extension north of Quail Lake, the Board of Supervisors hereby rejects Alternative E as infeasible on the basis of such considerations.[CEQA Findings pdf p. 237]

"Infeasible" normally means not practicable, not easy or convenient to do, but here it seems to mean simply "we'd rather not." ADD-F.13-2

I will address the arguments in order.

First, if the Board of Supervisors decides to allow Centennial to plunk 57000 thirsty people into a naturally arid and now drought-plagued rural area, there are of course going to be significant and unavoidable impacts on the water supply as well as air quality, biological resources, greenhouse gases, etc. But just because one cannot eliminate impacts, one need not refuse to lessen them, especially if the cost is minimal. Alternative E, which clusters higher density development east of the aqueduct, would definitely have a lesser impact on air, water, ADD-F.13-3

grading, open space, greenhouse gases, and visual resources. Keeping 656 acres north of the aqueduct development free would, in particular, remove the impact to biological resources in the tri-color blackbird foraging habitat northwards from Quail Lake.

ADD-F.13-3 cont.

Quail Lake's wetlands and surrounding grasslands are crucial for the survival of at least 70 species of migrating birds, providing an essential oasis stopover during biennial travels of hundreds or thousands of miles. Most importantly, a documentation project by two local photographers and a certified biologist, has shown that Quail Lake provides nesting habitat to the tri-color blackbird, which has recently been designated a threatened species by the California Fish and Game Commission. Up to 1000 and possibly 2000 adult tri-color blackbirds have nested at Quail Lake during 2015, 2016, and 2017. Our photographs indicate that most of their foraging is done north and east into land that is proposed to be Centennial Village 9–the very land that would be spared by Alternative E. Since it is very likely that building Village 9 will permanently destroy the colonies of tri-colored blackbirds, and since there is no guarantee that the colonies would accept the substitute wetlands in the "Mitigation Preserve," it would be much better to accept Alternative E and save the precious habitat currently in use.

ADD-F.13-4

The two further arguments (parks and regional trail) used in the CEQA Findings to dismiss this environmentally superior Alternative E are not persuasive, given the important habitat contained in those 656 acres north of Quail Lake.

ADD-F.13-5

It turns out that "certain adverse effects on park resources" means that since more folks (2177 more families, to be exact) will be using the lone 3-acre park in Village 3, that park will cost more to maintain. Well, yes, but I have this to say in response: *the future residents of Village 3 are being cheated of parkland already in the Project as well as in Alternative E.* I note that the Project's much-lower-density Village 9 will enjoy two parks totaling 13 acres for its 1574 families. Medium, high and very high density Village 3, on the other hand, can currently expect only a tiny 3 acres of park for its 1872 families [Table 4-2 and Exhibit 4-1]. We are dismayed by this disparity in what is being offered to presumably lower wealth families. Parity could be achieved if the 13 acres of Village 9 parks could be shifted to Village 3 along with its residents. It appears that there exists the open acreage to do it. 16 acres divided into two or three parks would serve Village 3's Alternative E total of 4049 families reasonably well. We regret that we have to ask: are the planners not creating more parkland in Village 3 because they want to make Alternative E less appealing?

ADD-F.13-6

The second item in the Findings' dismissal of Alternative E points to the loss of a regional trail extension if Village 9 is not built. However, the creation of an 8-foot wide trail well north of Quail Lake is not necessary to complete the proposed Regional trail. Instead, as Fig 3-39 shows, a hiking/biking/riding trail could easily continue from the southwestern part of the condensed project across the cement road bridge and down the west side of the aqueduct to the maintenance road around Quail Lake, and thence to the Gorman Post Road. We note too that the hiking/biking/riding trails that we use in nearby areas are usually no more than 4' wide.

In addition to the plant and animal habitat Alternative E would save, we note the more equitable human habitat it might create. Higher density clustering offers superior opportunity for affordable housing. Several of the Commissioners were concerned about the amount of affordable housing that would be available. We suggest that shifting housing units from the mostly low and very low density housing of Village 9 to the much higher density Village 3 is a way to achieve more moderately priced housing. Alternative E's version of Village 3 is the perfect place to put low and very low income housing units, whether they be rental units or

ADD-F.13-7

purchase units. We add the caveat, of course, that these units must be accompanied by the same proportion of parkland as in the other eight villages.

ADD-F.13-7 cont.

Because of water issues (see below) and the inevitable destruction and pollution of precious plant, animal and human habitat, the Tri-County Watchdogs would prefer that neither the proposed Project nor any of the proposed Alternatives go forward. But if the Planning Committee and the Board of Supervisors must choose one, we urge Alternative E, which will use somewhat less water and has correctly been designated "environmentally superior" to the others.

ADD-F.13-8

2. **Before construction, testing is needed for Valley Fever spores** given that residents of the Antelope Valley are nine times more susceptible to Valley Fever than folks who live elsewhere in Los Angeles county. WOTF responded to our request for soil-testing by drawing on an outdated 2013 California Department of Public Health document in order to state that "there is no reliable way to test the soil for spores before working in a particular place" [Response to Comment F.3A-44, FEIR 2-337]. More recent research indicates that there is a reliable and relatively inexpensive way to identify regions of spores, and that doing so would allow special measures to be taken in those regions.

ADD-F.13-9

At a recent Valley Fever seminar in Lancaster, Professor of Microbiology Antje Lauer informed us that it would cost less than $200,000 to test for cocci-bearing zones throughout the Centennial region [see *The Mountain Enterprise*, June 29, pp. 2-3]. In those regions, Tyvek suits for workers should be mandatory not optional, and street signs should a warn nearby passersby to take special precautions. Contrary to WOTF's belief that such signs would "elicit fear without reasonable basis" [*loc cit*], warning signs educate and give the public a measure of control over their own health.

ADD-F.13-10

3, **The water supply assessment**, which is constantly brought forth to show that there is sufficient water for 20 years of building out, is paper water only. According to Table 5.18-5, the Antelope Valley will see demand surge over supply if drought continues, as it very likely will in southern California. If a lengthy drought happens AVEK will get less water from SWP and won't be able to return to Tejon Ranchcorp the water it borrowed in previous drought years. The Total Safe Yield for groundwater pumping will plummet. Water "rights" will not necessarily translate into water flow. Furthermore, we note that Table 5.18-12, which gives the figures for Centennial supply during variously spaced "multiple-dry year periods," chooses three years (rather than five or seven) as the set period. This choice seems foolish, since southern California has gone through a five-year drought recently, and after a one year respite in 2017, we are back in drought conditions. Centennial's stock holders will be left holding the bag when MM.18.2 kicks in and the corporation is forced to prove water supply after building 4000 units and then again after 10,000. It seems unconscionable to greenlight such a huge development project --and dare I say investment boondoggle?-- in this time of climate change.

ADD-F.13-11

4. **Because of startling information we have just discovered, we are concerned about TRC's trustworthiness concerning both the CEQA process and the proposed mitigation preserve.**

It appears that, TRC is imposing a litmus test on scientists and hikers who wish to join Tejon Conservancy's public access events on Conservancy Lands, including the 62,000 acres whose conservation easement was purchased by $15.8 million taxpayer dollars (and within which Mitigation Preserve Areas 3 and 4 seem to be taken). We know this partly because one of our own members and her husband, who signed up for a hike that took place on July 8, was denied

ADD-F.13-12

entry because, she was told, she had made negative comments about the proposed Centennial development. Whatever negative comments she may have made at a meeting or by association with the Tri-County Watchdogs, were made as part of the CEQA process.

Our local mountain communities newspaper, *The Mountain Enterprise*, immediately began an investigation to see if others had been banned. They quickly discovered six other individuals who had been forbidden access, and they unearthed evidence that membership in or even just association with certain environmental groups was enough to get one banned. The groups that appear to have been banned so far are: the California Native Plant Society (which has 10,000 members, mostly in California), the Rancho Santa Ana Botanic Garden, The Eriogonum (buckwheat) Society (because of its affiliation with Rancho Santa Ana Botanic Garden), the Center for Biological Diversity, and the Tri-County Watchdogs. [See *The Mountain Enterprise* July 6, pp.1,3,6, for details.]

ADD-F.13-12 cont.

Included in the Centennial FEIR is the (Ranch-Wide Agreement, 2009), which sets up the Conservancy and prepares the way for the Conservancy's acquisition of the 62,000 acres mentioned above. An important part of the Agreement is TRC's allowing public access to Conservancy lands. There we are told:

> *Components of the Public Access Plan shall include, but not be limited to: (i) encouraging and facilitating access by the Public, including to underserved communities and populations; (ii) selecting appropriate locations for Public Access, trails and facilities consistent with the RWMP to preserve the Conservation Values of the Conservation Easement Area; (iii) coordinating such Public Access with the Reserved Rights so that such Public Access does not unreasonably interfere with Owner's or other occupant's operation of the Conservation Easement Area for the Reserved Rights; and (iv) entry and use guidelines to ensure the safety of the Public while on the Conservation Easement Area.* [FEIR Appendix 5.7 E, Section 3.11, p. 41; italics added]

None of those four components (nor the additional component of TRC's right to schedule private recreational activities on Conservation lands) mentions the right to block individual members of the public. Component 4, "safety of the Public" might be so interpreted, but a banned member of the California Native Plant Society, who used to be a doctoral student researcher and volunteer docent at the Conservancy, clearly poses no danger to public safety. It is more likely that TRC has relied on the phrase "not limited to" in order to add another component to the Public Access Plan: the safety of its own financial plans to develop three cities on Tejon Ranch.

ADD-F.13-13

What three of the banned groups have in common is having submitted comments questioning the favorable conclusions of the DEIR. According to *The Mountain Enterprise*, the California Native Plant Society shared its botanical research with the Center for Biological Diversity and then the two groups co-signed a comment on the DEIR [July 6, p. 1]. Tri-County Watchdogs also submitted a critical comment. The other two groups are considered guilty by association with the California Native Plant Society [*ibid* p. 6].

ADD-F.13-14

TRC has not been shy about letting people know that they are banned because of their public comments during the CEQA process. Think about the effect this may have had and will have on scientists who hope to study the important habitats on Conservancy lands. Will they be silent if they discover things that may not be in the financial interest of TRC? Will the very "Best Management Practices" actually be devised and employed to rehabilitate and preserve those precious lands?

ADD-F.13-15

And how many nature lovers and hikers will refrain not only from offering public comment but also from financially supporting the Conservancy, knowing that even if they become members of the Conservancy they could be denied access if they also support other environmental groups?

ADD-F.13-15 cont.

We ask, therefore, that you give the Mitigation Preserve extra scrutiny and give the science in the comment letters from the Center for Biological Diversity and California Native Plant Society another read.

ADD-F.13-16

Sincerely yours,

Katherine C. King
Secretary, Tri-County Watchdogs

Response to Comment Letter ADD-F.13
TriCounty Watchdogs
July 10, 2018

Response to Comment ADD-F.13-1:

This introductory comment summarizes four issues of concern to the Commenter, all of which are detailed in the Commenter's subsequent comments and addressed in the County's responses thereto. With regard to this comment's summarized concerns regarding Alternative E, please see responses to Comments ADD-F.13-2 through ADD-F.13-8. With regard to this comment's summarized concerns regarding Valley Fever, please see responses to Comments ADD-F.13-9 and ADD-F.13-10. With regard to this comment's summarized concerns regarding water resources, please see response to Comment ADD-F.13-11. With regard to this comment's summarized concerns regarding the Project Applicant, please see responses to Comments ADD-F.13-11 through ADD-F.13-16.

Response to Comment ADD-F.13-2:

As this comment correctly notes, the EIR identifies Alternative E as the "environmentally superior alternative" under CEQA. However, per Public Resources Code § 21081(a)(3) and CEQA Guidelines § 15091(c)(3), a lead agency in its CEQA findings may reject a project alternative it finds to be "infeasible." When considering the feasibility of a project alternative, CEQA provides that the lead agency may take into account economic, environmental, social, technological, and legal factors, as well as "other considerations." See, Public Resources Code § 21081(a)(3); CEQA Guidelines § 15091(a)(3); *California Native Plant Soc'y v. City of Santa Cruz* (2009) 177 Cal.App.4th 957, 1002. After weighing these considerations, a lead agency may determine that a project is undesirable from a policy perspective and on that basis reject a project alternative as infeasible. *City of Del Mar v. City of San Diego* (1982) 133 Cal.App.3d 401, 417.

The Commenter cites proposed CEQA findings to support its assertion that there is no legitimate reason dismiss to Alternative E as infeasible. As an initial matter, it should be noted that the draft CEQA findings cited by the Commenter are in preliminary draft form and do not represent, and should not be relied upon, as the final findings that may ultimately be made by County decisionmakers. Moreover, this comment does not provide a full description of the various considerations taken into account by the draft findings. For example, the draft findings explain that, unlike the Project, Alternative E would not provide a second vehicle crossing over the California Aqueduct, which could limit emergency evacuation options for Project residents and thus be inconsistent with County policies regarding public safety. Similarly, this comment's assertion that Alternative E "would not be ineffective in avoiding significant environmental impacts" is not accurate. As explained in the draft findings cited by the Commenter, as well as Draft EIR page 8-60, Alternative E would not avoid any of the Project's significant and unavoidable effects, though it would somewhat reduce some significant impacts as compared to the Project. Also, as discussed in the draft findings cited by the Commenter, Alternative E would not provide a regional trail connection that is

proposed by the Project and could result in higher costs for public infrastructure improvements that correlate with higher intensity of uses, such as parks.

In addition, Alternative E implicates policy considerations that are not discussed in the preliminary draft findings but could be added to the final findings. For example, if approved, Alternative E would eliminate the Project's proposed Village Nine, and Village Eight's Low Density Residential-designated lands located east of 300th Street would instead be designated as Very Low Residential, as explained on Draft EIR page 8-18. Thus, Alternative E would provide approximately 865 fewer acres of land designated for Low Density Residential uses, as compared to the proposed Project. Although Alternative E would provide the same number of residential units as the proposed Project, most of these units would either be medium/high density attached residential units or very low density detached units, with substantially fewer low density detached units included in the community's overall housing mix. Accordingly, Alternative E, would provide an unbalanced range of housing types by reducing the supply of low density single family detached residential units that are typically attractive to middle income families. This result could dissuade both middle income workers (and employers hoping to hire them) from relocating to the Project site. Moreover, Alternative E's lack of balanced housing choice would be inconsistent with General Plan Housing Element Policy 3-1, which seeks to promote mixed income neighborhoods and increase housing choices for all economic segments of the population.

In addition, Alternative E could lead to higher housing cost for those families looking to purchase high density housing in Village Three. As explained in response to Comment ADD-F.13-6, under Alternative E, all of the units planned for Village Nine and approximately 603 units in Village Eight would be accommodated in Village Three's multifamily Medium Density, High Density, and Very High Density designations. According to a recent report prepared by housing experts at the University of California, Berkley (UCB Report), high-rise and even mid-rise (e.g., six story) residential buildings are far more costly to build on a per square foot basis than single family homes – three to five times higher – and are thus infeasible in most California markets.[3347] Even less costly multi-family units such as quadplexes (four units in a two-story building) and stacked flats (one or two units per floor, generally limited to four stories) – are approximately 30 percent more costly than single family homes on a per square foot basis.[3348] Thus, Alternative E would likely result in higher sales prices for Village Three's attached dwelling units.

The UCB Report also indicates that Southern California counties faced a larger negative fiscal impact for compact multi-family residential development than is the case with lower density development.[3349] Thus, Alternative E may result in fiscal losses to the County or otherwise reduce or eliminate the fiscal surplus projected by the Project. Finally, it should be noted that, in adopting the AVAP and its "Rural Preservation Strategy," the County has made a policy choice to maximize development in designated Economic Opportunity Areas (EOAs)

[3347] Nathaniel Decker et al., Right Type Right Place: Assessing the Environmental and Economic Impacts of Infill Residential Development through 2030. U.C. Berkeley Terner Center for Housing Innovation and Center for Law, Energy and the Environment (March 2017): http://ternercenter.berkeley.edu/uploads/right_type_right_place.pdf

[3348] Ibid.

[3349] Ibid.

so as to generate property tax revenues and developer fees needed to help fund new infrastructure and public facilities needed to serve the AVAP planning area without sacrificing the rural character of the Antelope Valley outside of EOAs, as discussed in Final EIR, response to Comment F.8-20. Alternative E would be inconsistent with this policy choice, however, by limiting the type and extent of development that could occur in the West EOA.

In summary, although Alternative E would reduce some of the Project's significant and unavoidable environmental effects, it would not reduce any such effects to less-than-significant levels. Moreover, it would (i) not provide a secondary evacuation route across the California Aqueduct, (ii) increase maintenance costs of certain categories of public infrastructure, such as parks, (iii) provide an unbalanced mix of housing options, (iv) increase housing costs for multifamily residential units, (v) have a negative fiscal impact on the County, and (vi) be inconsistent with certain County housing and planning policies. When these factors are taken into consideration, this comment's claim that there is no basis for finding that Alternative E is infeasible for purposes of CEQA is without merit.

Response to Comment ADD-F.13-3:

As disclosed in the EIR, the proposed Project would cause certain significant and unavoidable impacts related to water resources, air quality, biological resources, and greenhouse gases, as this comment correctly notes. The Commenter is also correct that CEQA requires the EIR to identify those alternatives and mitigation measures that could feasibly reduce such significant and unavoidable impacts. As explained on Draft EIR page 8-59, Alternative E would result in similar or slightly reduced effects to most population-driven impacts (e.g., noise, traffic, public services, and utility demands) as compared the Project; Alternative E would result in decreased impacts to grading-driven impacts (e.g., biological resources, cultural resources, and visual resources); and Alternative E would reduce some on-site automobile-driven impacts (e.g., air quality, greenhouse gas emissions). Alternative E would not reduce any of the Project's significant and unavoidable impacts to less-than-significant levels, however, as discussed on Draft EIR page 8-60. This comment's stated preference for Alternative E over the Project is noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration.

Response to Comment ADD-F.13-4:

The Commenter's opinion regarding the Project's impacts on tricolored blackbird is noted. The Draft EIR discussed that focused tricolored blackbird surveys conducted for the Project in 2015 found nesting colonies at Quail Lake and found that foraging occurred on the Project site as well as elsewhere (Draft EIR Appendix 5.7-B, Birds-6). As stated on page 5.7-149 of the Draft EIR, a review of the Quail Lake and the on-site colony subset identified a potential post-Project reduction of approximately 20 percent of potentially suitable foraging habitat at each location. In the Draft EIR, the indirect impacts described above were considered potentially significant pursuant to CEQA, and mitigation was proposed to reduce the impact to a less than significant level. MM 7-7 has been included as dedicated mitigation for the

tricolored blackbirds, and MM 7-10 and MM7-12 include mitigation for tricolored blackbird habitat.

As stated in Final EIR, response to Comment F.3-14, the land use adjacent to Quail Lake up to approximately ½ mile is almost entirely open space recreation and, therefore, will be permeable and available for foraging under Project conditions. Furthermore, MM 7-10 has been modified to preserve additional mitigation lands, which includes preservation and management of 15,258 acres of suitable foraging habitat for tricolored blackbird and the Mitigation Preserve includes 1.1 acres of existing breeding habitat. Finally, MM 7-12 will preserve and enhance riparian areas, which will provide more breeding habitat. Thus, with mitigation, there is sufficient foraging habitat to support the existing colonies in the Project vicinity and provide additional breeding and foraging opportunities. In regard to the commenter's concern for the acceptance of "substitute" wetlands, it should be noted that some of the freshwater marsh habitat within the Mitigation Preserve is existing and has confirmed tri-colored blackbird use. Additionally, most of the habitat used by colonies in the region are created wetlands (such as Holiday Lake and Fairmont Reservoir) and there is more than a reasonable expectation that future created wetlands with potentially suitable habitat would be utilized by tri-colored blackbirds. Nevertheless, this comment's stated preference for Alternative E over the Project is noted and will be provided to County decision makers for their consideration.

Response to Comment ADD-F.13-5:

This comment is noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration. With regard to this comment's concerns regarding parks and the Project's proposed regional trail connection, please see response to Comment ADD-F.13-6. With regard to this comment's assertions regarding the habitat value of the acreage that makes up the Project's proposed Village Nine area, please see response to Comment ADD-F.13-4.

Response to Comment ADD-F.13-6:

As discussed on Draft EIR page 8-55, Alternative E could result in higher costs for public infrastructure categories that correlate with intensity of uses, and the EIR uses sports playing fields within parks as an example of such infrastructure. This is so because, under Alternative E, the 1,574 dwelling units that the Project's proposes in Village Nine would be accommodated within the existing residential land use density ranges within Village Three (i.e., the town center). Moreover, under Alternative E, the Project's proposed Low-Density Residential-designated lands on the east side of 300th Street West would be re-designated to Very Low Density Residential, resulting in a net reduction of 603 dwelling units. These units would also be accommodated within the existing Village Three land use density ranges. Thus, under Alternative E, Village Three would accommodate 2,177 more dwelling units as compared to the Project, as discussed on EIR page 8-52. Since Village Three would be much denser under Alternative E, local park resources will likely see more use as compared to the Project. This will likely result in higher maintenance costs for such facilities, as discussed above.

This comment's assertion that the residents of Village Three are somehow "being cheated" because Village Three has a smaller park overlay than does Village Nine is without merit. As an initial matter, this comment implicitly assumes that residents of Village Three will only be permitted access to parks located within Village Three, which is not the case. The residents of Village Three will have access to hundreds of acres of parks, open space and recreational opportunities offered by the Centennial Specific Plan. Moreover, the Specific Plan's park acreages are calculated pursuant to the methodology established by the County's Parkland Dedication Ordinance and exceeds both the County General Plan's parkland policy objectives, as well as state requirements established under the Quimby Act, as explained on Draft EIR page 5.14-1. Finally, this comment ignores the fact that Village Three is located immediately adjacent to a planned community regional park that will be a minimum of 20 acres in size and will provide a broad range of regionally serving amenities, such as ball fields, tennis courts, playgrounds, and barbecue and picnic areas, as discussed on EIR page 5.14-20. In light of these facts, the Commenter's suggestion that residents of Village Three are "being cheated" by a disparity of park resources as between villages, or that Alternative E was designed to intentionally limit Village Three access to park resources, is inaccurate.

With regard to the Commenter's proposed substitute for the regional trail connection that would not be provided under Alternative E, the Commenter incorrectly assumes that a regional trail could cross the National Cement Plant Road bridge. Currently, there is a pedestrian sidewalk on this bridge, but it is not wide enough to accommodate bicycle or horse traffic, nor does it meet the County's regional trail design standards. Alternative E does include any improvements to such bridge. Moreover, this comment incorrectly assumes that pedestrian/bike/horse traffic can legally access the Department of Water Resources maintenance road. This maintenance road is fenced off and closed to the public and it is not legally feasible to allow public access to the road for trail uses. Even if the public could legally access the DWR maintenance road, there is no road or trail that currently connects the maintenance road to Gorman Post Road and no such connection would be provided by Alternative E. Finally, it is not legally feasible to construct a regional trail that is four feet wide because County standards mandate that recreational trails be a minimum of 8 feet in width.[3350]

Response to Comment ADD-F.13-7:

This comment's recommendations are noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration. However, the comment's assertion that higher density clustering in Alternative E offers superior opportunity for affordable housing is inaccurate. According to a recent report prepared by housing experts at the University of California, Berkley, high-rise and even mid-rise (e.g., six story) residential buildings are far more costly to build on a per square foot basis than single family homes –

[3350] County of Los Angeles. May 17, 2011. County of Los Angeles Trails Manual, Table 2.4-1, p. 2-6: http://file.lacounty.gov/SDSInter/dpr/208899_TrailsManual.pdf.

three to five times higher – and are thus infeasible in most California markets.[3351] Even less costly multi-family units such as quadplexes (four units in a two-story building) and stacked flats (one or two units per floor, generally limited to four stories) – are approximately 30 percent more costly than single family homes on a per square foot basis.[3352] Nevertheless, ten percent of the residential units constructed throughout the Project will be made available as affordable units to very low, low, and moderate income individuals and families earning between fifty percent and one hundred twenty percent of the Los Angeles County area median income. Moreover, the Project's affordable units will be subject to deed restrictions and affordability covenants. As discussed in response to Comment ADD-F.13-6, parkland requirements for the Project are calculated pursuant to the methodology established by the County's Parkland Dedication Ordinance.

Response to Comment ADD-F.13-8:

This comment's general opposition to the Project and its stated preference that Alternative E be approved instead of the Project are noted and will be provided to Regional Planning Commission and Board of Supervisors for their consideration. This comment does not raise a specific concern regarding the adequacy of the EIR and therefore no further response is required.

Response to Comment ADD-F.13-9:

As this comment correctly notes, the Antelope Valley has the highest rate of reported cases of Valley Fever in Los Angeles County, as disclosed on Draft EIR page 5.3-15. As explained in the Final EIR, there is no reliable way to test the soil for Valley Fever spores before working at a particular location. (Final EIR, response to Comment F.3A-43). According to the Centers for Disease Control and Prevention, "testing soil for *Coccidioides* [i.e., Valley Fever spores] isn't likely to be useful because the fungus is thought to be common in the soil in certain areas. A soil sample that tests positive for *Coccidioides* doesn't necessarily mean that the soil will release the fungus into the air and cause infection. Also, there is no commercially-available tests to detect *Coccidioides* in soil. Testing soil for *Coccidioides* is currently only done for scientific research."[3353] The CDC's conclusions are consistent with the 2013 California Department of Health document referenced in this comment and cited in the Final EIR. With regard to the "recent research" referenced in this comment, please see response to Comment ADD-F.13-10.

Response to Comment ADD-F.13-10:

As discussed in response to Comment ADD-F.13-9, the Center for Disease Control and Prevention (CDC) advises that there is no reliable way to test the soil for Valley Fever spores before working at a particular location. The Commenter disagrees with that expert

[3351] Nathaniel Decker et al., Right Type Right Place: Assessing the Environmental and Economic Impacts of Infill Residential Development through 2030. U.C. Berkeley Terner Center for Housing Innovation and Center for Law, Energy and the Environment (March 2017): http://ternercenter.berkeley.edu/uploads/right_type_right_place.pdf.

[3352] Ibid.

[3353] Center for Disease Control and Prevention. *Sources of Valley Fever (Coccidioidomycosis)*. CDC: https://www.cdc.gov/fungal/diseases/coccidioidomycosis/causes.html (accessed on July 24, 2018).

determination, however, citing a newspaper article that reports on a community meeting at which a professor from California State University, Bakersfield discussed academic "pilot projects" regarding soil testing for Valley Fever.[3354] However, the cited newspaper article provides no evidence that the pilot soil testing methodologies have undergone scientific peer review, have been published, or that such tests are commercially available for use. As discussed in response to Comment ADD-F.13-9, the CDC sees little value in testing soils in areas where Valley Fever spores are common, such as Antelope Valley. In any case, testing would not reduce health risks because the EIR conservatively *presumes* that Valley Fever spores affect the entire Project site and present a health risk to existing and future residents and workers in the Project area through ground-disturbing activities. In light of this presumption, the EIR imposes feasible mitigation measures to reduce the EIR's assumed Valley Fever risk to less than significant levels, as discussed on Draft EIR page 5.3-19.

In addition, in response to comments regarding the Project's potential health impacts related to Valley Fever, the Final EIR revised MM 3-2 to require the Project Applicant/Developer to provide construction workers with Tyvek coveralls available in a range of sizes upon request, and to require workers using such suits to remove them at the Project site at the end of each working day. (Final EIR, response to Comment F.3A-38) The Final EIR also added new mitigation measure MM 3-11, which requires the Project Applicant/Developer to create and maintain during the Project construction period a website that provides public information regarding dust generating activities at the Project site, and requires that notice of the website be provided to all surrounding communities and to all schools located in Gorman, Lebec, and Frazier Park. (Final EIR, responses to Comments F.3-29 and F.3A-38)

Finally, in response to the Commenter's concerns regarding Valley Fever, MM 3-2, as shown on Final EIR pages 3-3 and 3-4, is hereby further revised for adoption in the CEQA findings as follows:

MM 3-2 To aid in the prevention of Valley Fever among construction crews on the Project site, the following measures shall be implemented by the Construction Contractor during all construction activities:

- Have Tyvek™ coveralls/suits available in a range of sizes for construction worker use upon request. If used, require the worker to remove the Tyvek™ suit at the work site at the end of the day.
- Hire crews from Los Angeles and/or Kern County populations, or other areas where Valley Fever is endemic, where possible, since it is more likely that they have been previously exposed to the fungus and are therefore immune.

[3354] Patric Hedlund. *Centennial could test for valley fever spore hotspots.* The Mountain Valley Enterprise, June 29, 2018, pp. 2-3.

- Prior to Project construction initiation, and for any personnel additions after initial Project construction initiation, the following California Department of Public Health (CDPH) materials on Valley Fever (or the most updated materials applicable to Los Angeles County) shall be distributed to worksite supervisors:
    - CDPH pamphlet entitled "Preventing Work-Related Coccidioidomycosis (Valley Fever)" available at: http://www.cdph.ca.gov/programs/hesis/Documents/CocciFact.pdf. (CDPH 2013a)
- Prior to Project construction initiation, and for any personnel additions after initial Project construction initiation, the following CDPH materials on Valley Fever (or the most updated materials applicable to Los Angeles County) shall be distributed to construction workers:
    - CDPH pamphlet entitled "Valley Fever Fact Sheet" available at: http://www.cdph.ca.gov/HealthInfo/discond/Documents/VFGeneral.pdf. (CDPH 2013b)
    - CDPH pamphlet entitled "Hoja de datos de la Fiebre del Valle (Valley Fever Fact Sheet in Spanish)" available at: http://www.cdph.ca.gov/HealthInfo/discond/Documents/HojaDeDatosDeLaFiebreDelValle.pdf (CDPH 2013c).
    - CDPH pamphlet entitled "Fact Sheet Valley Fever (Valley Fever Fact Sheet in Tagalog)," available at: http://www.cdph.ca.gov/HealthInfo/discond/Documents/TagalogGeneralValleyFeverFactSheet.pdf (CDPH 2013d).
- During rough grading and construction, the access way into the Project site from adjoining paved roadways shall be paved or treated with environmentally safe dust-control agents.
- <u>Provide evidence to the Department of Regional Planning that the Project Applicant/Developer has developed a "Valley Fever Training Handout," training, and schedule of sessions for education to be provided to all construction personnel. All evidence of the training session materials, training handout(s) and training schedule shall be submitted to the Department of Regional Planning within 24 hours of the first training</u>

session. Multiple training sessions may be conducted if different work crews will come to the Project site for different stages of construction; however, all construction personnel shall be provided training prior to beginning work. The evidence submitted to the Department of Regional Planning regarding the "Valley Fever Training Handout" and training sessions shall include the following:

  - A sign-in sheet (to include the printed employee names, signature, and date) for all employees who attended the training session;
  - Distribution of a written flyer or brochure that includes educational information regarding the health effects of exposure to criteria pollutant emissions and Valley Fever (including the CDPH informational materials described in this mitigation measure);
  - Training on methods that may help prevent Valley Fever infection; and
  - Train employees how to use personal protective equipment, such as respiratory equipment, how to reduce exposure to pollutants, how to recognize symptoms of Valley Fever, and to promptly report any suspected systems to a work supervisor. Training shall also emphasize the benefits of wearing Tyvek suits in relation to Valley Fever exposure and explain that such protective clothing is available upon request. Proof that the demonstration is included in the training shall be submitted to the Department of Regional Planning.

- Provide construction workers separate, clean eating areas equipped with hand-washing facilities.
- Require crews to use masks or half-faced respirators equipped with a minimum N-95 protection factor and that are adequate to restrict inhalation of particulates during Project clearing, grading, and excavation operations in accordance with California Division of Occupational Safety and Health regulations. Respirator equipment shall be readily available and shall be provided to employees during work.

- Require employees to be medically evaluated, fit-tested, and properly trained on the use of the required masks or respirators
- Provide High-Efficiency Particulate Air (HEPA) filters for heavy equipment with factory enclosed cabs capable of accepting the filters. Require contractors utilizing applicable heavy equipment to furnish proof to the Department of Regional Planning of worker training on proper use of applicable heavy equipment cabs, such as turning on air conditioning prior to using the equipment.
- Provide communication methods, such as two-way radios, for use in enclosed heavy equipment cabs.
- Install equipment inspection stations at each construction equipment access/egress point. Examine construction vehicles and equipment or excess soil materials and clean, as necessary before equipment is moved off-site.
- When possible, position construction workers upwind or crosswind when digging a trench or performing other soil-disturbing tasks.
- Prohibit smoking at the worksite outside of designated smoking areas; designated smoking areas will be equipped with hand-washing facilities.
- Post Valley Fever warnings at on-site construction areas and restrict access to such areas by visitors without adequate training and respiratory protection.
- Audit and enforce compliance with applicable California Occupational Safety and Health Administration health and safety standards on the job site.

This comment's suggestion that MM 3-2 be revised to ensure that Tyvek suits for workers be mandatory, rather than optional, is noted and will be provided to County decisionmakers for their consideration. Workplace safety requirements are comprehensively regulated by the Cal/OSHA. Cal/OSHA regulations do not require construction workers operating in areas subject to Valley Fever to wear Tyvek suits or similar clothing, though they do recommend that Tyvek suits be provided to workers. As noted above, MM 3-2 was revised in the Final EIR to require the Project Applicant/Developer to provide Tyvek suits to construction workers. MM 3-2 has been further revised to require all Project construction workers to be trained on the benefits of wearing Tyvek suits when engaging in ground-disturbing activities and their availability at the construction site. Temperatures at the Project site are hot in the summer months, and research demonstrates that wearing Tyvek suits in working conditions

contributes to adverse heat stress effects.[3355] Given the competing health concerns associated with Tyvek suit use and the applicable regulatory requirements, it has been determined that the MM 3-2, as revised, strikes an appropriate balance with respect to use of Tyvek suits on the Project site during construction activities, and would further assure health risk impacts are mitigated to less than significant levels.

Response to Comment ADD-F.13-11:

The Commenter's opinion regarding the reliability of water supply is noted and will be provided to the Regional Planning Commission and Board of Supervisors for consideration. However, the County disagrees and concludes that Project EIR analysis demonstrates reliable and sustainable water supplies, including with regard to the Project's Water Supply Assessment. See Draft EIR, Appendix 5.18-A. After thorough analysis, the EIR appropriately concludes that Project water supplies will sustainably meet buildout potable and recycled water demands and would in fact maintain an average annual reserve supply in the two Project water banking facilities of more than 79,000 acre-feet after buildout has been achieved. This surplus would persist over time based on an 82-year hydrologic period of record, including single-dry and multiple-dry years, and taking account of potential climate change impacts.

As shown on EIR Tables 5.18-10 through 5.18-12, multiple-dry year projections are presented in five-year increments with the first two years shown as normal years and the last three years as a dry period or drought. This data was derived from the peer-reviewed Centennial Specific Plan Water Supply Assessment (WSA), which is included as EIR Appendix 5.18-A. The WSA was prepared in accordance with Senate Bill 610 (Water Code § 10910 et seq.) and the California Department of Water Resources' Guidebook for Implementation of Senate Bill 610 and Senate Bill 221 (DWR Guidebook). The DWR Guidebook was designed to provide step-by-step instructions for preparing an SB 610 water supply assessment and specifically provides that each water supply assessment should evaluate a multiple-dry year scenario over a five-year period with the first two years shown as normal years and the last three years as a dry period. Thus, the EIR's water supply impact analysis was prepared in accordance with state law and expert agency recommendations and presents a reasonable, good faith disclosure and analysis of the Project's potential impacts on water resources appropriately based on an industry-standard analytical approach. That is all that CEQA requires. (*Laurel Heights Improvement Ass'n v. Regents of Univ. of Cal*. (1988) 47 Cal3d 376, 392; *Eureka Citizens for Responsible Gov't v. City of Eureka* (2007) 147 Cal.App. 357, 372.) The EIR's water supply analysis is not required to address all variations of the issues or permutations of the data, and a lead agency is not required to conduct every recommended test and perform all recommended research in evaluating a project's environmental impacts. (*San Joaquin Raptor Rescue Ctr. v. County of Merced* (2007) 149 Cal. App.4th 645, 680; *Gray v. County of Madera* (2008) 167 Cal.App.4th 1099, 1125.)

[3355] Debra A. Griffith, Dr. William Reddan, William Schmitz. (1992) *Heat Stress Associated With the Use of Tyvek Coveralls in Asbestos Removal Inspection*. University of Wisconsin. Proceedings of the Human Factors Society 36th Annual Meeting: http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.898.6202&rep=rep1&type=pdf (accessed July 24, 2018).

With regard to the reliability of imported water supplies for the Project, the potential delivery reliability and variability of Project State Water Project supplies is discussed in Draft EIR Section 5.18, Water Resources, pages 5.18-20 to -28 and -54 to -64. The analysis of Project imported water supplies uses the Early Long Term scenario also used in the California Department of Water Resources' State Water Project Delivery Capability Report, and incorporates the effects of the most severe droughts during the 82-year historical record, plus additional adjustments to account for potential climate change effects and the 5 percent single dry year delivery level used by the Antelope Valley-East Kern Water Agency in the Agency's 2015 Urban Water Management Plan. Consequently, the Draft EIR includes a discussion of State Water Project delivery reliability that is consistent with the conservative Early Long Term scenario developed in the Delivery Capability Report and the same scenario, with a reduced single dry year reliability level, used in the Antelope Valley-East Kern Water Agency's 2015 Urban Water Management Plan. The Commenter provides no evidence for its assertion that this analysis is inadequate, and no further response is required.

With regard to MM 18-2, it is a precautionary measure, and requires implementation of water use monitoring and reporting to ensure that the Project is meeting demand for water supply and that water efficiency requirements are met, including through the submission of water use reports to the County at the end of the 5th and 10th years or the occupancy of the 4,000th and 10,000th units, whichever occurs latest. If a report determines that water use is exceeding projected levels, the Project Water Purveyor must identify specific response measures to ensure that water supplies will meet future demand. Potential sources of additional supply, if necessary, are discussed on pages 5.18-69 to 5.18-72 of the Draft EIR and include potential groundwater transfers as allowed by the Adjudication Judgment and Physical Solution, supplemental surface water purchases and imports, and investments in additional recycled water use or storm water reuse in the Antelope Valley. If supply demand is not met, no additional development will occur until sufficient supplies are identified for the Project.

For further discussion of Project water supply analysis, including with regard to drought and climate change, see Final EIR, responses to Comments E.1-5, F.3-4 through F.3-9, F.3A-6, F.3A-9, F.8-213, F.8-214, and F.8-220.

Response to Comment ADD-F.13-12:

This comment and the Mountain Enterprise article are noted, have been provided to the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. This comment does not specifically address the Project or the adequacy of the EIR, and no further response is required under CEQA. However, for informational purposes the County notes that many scientists have been and continue to be allowed access to the ranch per the RWA and RWMP, and thorough, independent scientific review of Tejon Ranch, including the Project site, has been conducted. The Project Applicant also addressed this article in its July 11, 2018 testimony to the Regional Planning Commission, explaining that the RWA does not provide unrestricted public access to Tejon Ranch, but rather provides the express right to withhold access permission. The Applicant further explained that its

intention has been to deny access to Center for Biological Diversity and their partner organization, the California Native Plant Society, who have active, ongoing litigation against Kern County, Los Angeles County, and Tejon Ranch and oppose Tejon Ranch projects,

Response to Comment ADD-F.13-13:

This comment does not specifically address the Project or the adequacy of the EIR, and no further response is required under CEQA. However, for informational purposes, the County notes that the Commenter is correct that Section 3.11 of the RWA addresses public access, indicating that the Owner shall provide significant and appropriate access to Tejon Ranch to the public. Section 3.11 of the RWA required the preparation of a Public Access Plan as part of the RWMP, which has been duly prepared, and the Applicant has been implementing the public access plan. See Final EIR, Appendix 5.7-D, Ranchwide Management Plan, Volume 3, Public Access Plan, for more information. Neither the RWA nor the RWMP restricts the Applicant's legal right to refuse access to its private property if it is not "appropriate". For further discussion of withholding access to Tejon Ranch, see response to Comment ADD-F.13-12.

Response to Comment ADD-F.13-14:

This comment and the Mountain Enterprise article are noted, have been provided to the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. This comment does not specifically address the Project or the adequacy of the EIR, and no further response is required under CEQA. For further discussion, please see responses to Comments ADD-F.13-12 and ADD-F.13-13.

Response to Comment ADD-F.13-15:

This comment and the Mountain Enterprise article are noted, have been provided to the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. This comment does not specifically address the Project or the adequacy of the EIR, and no further response is required under CEQA. For further discussion, please see responses to Comments ADD-F.13-12 and ADD-F.13-13.

Response to Comment ADD-F.13-16:

The Commenter's request will be provided to the Regional Planning Commission and Board of Supervisors for consideration. The County has thoroughly considered the creation of the Mitigation Preserve and has considered and addressed correspondence and public testimony from the Center for Biological Diversity and the California Native Plant Society. The County further notes that with regard to the above-mentioned the Commenter's assertions that scientific EIR evaluation of biological impacts is insufficient, the entirety of the Project site has been evaluated for biological resources in numerous studies conducted over a 16-year period, all of which are described in Section 5.7, Biological Resources, of the Draft EIR.

More specifically, with respect to the focused surveys done on the Project site and addressed in the Draft EIR, these have been conducted on the Project site since 1999 in potentially suitable habitat for the species being surveyed—an industry-wide methodology. Wildlife species generally inhabit certain habitats while avoiding others. For example, a survey for breeding tricolored blackbirds would focus on areas potentially containing their breeding habitat (marsh) and would avoid areas where no potential for that habitat occurs (oak woodland). A combination of tools such as vegetation and/or topography maps, aerial photograph, and historical knowledge of the site help biologists narrow down their survey area for a given species. Certain surveys, such as plant surveys, have been conducted comprehensively and cover the entire Project footprint.[3356] Other surveys are more general in nature, such as raptor surveys, and again in that instance the entire Project site would be surveyed. Focused surveys have been conducted in accordance with approved protocols.[3357] The various biologists studying the site since 1999 have had full access to the Project site. The diversity of the wildlife species is as expected for an extensively grazed landscape (compacted soil, invasive species) with relatively low vegetative cover over the majority of the Project site. As such, all plant and wildlife species observed or with potential to exist on the Project site based on the extensive site-specific and regional body of data is addressed in the Draft EIR. It is noted that, as appropriate under CEQA, the Draft EIR focuses on impacts associated with solely the Project site, and not the Tejon Ranch as a whole.

The EIR has an obligation to follow State CEQA Guidelines and to report on the findings of the various focused and general plant and wildlife surveys that have occurred over the life of the Project.[3358] Detailed studies and mapping provide clearer, not obfuscated information. The EIR's grassland studies were conducted with input from the Significant Ecological Areas Technical Advisory Committee (SEATAC) and detailed information was required in an effort to more accurately map and describe the different types of grasslands occurring on the Project site. Mitigation for sensitive habitats requires accurate vegetation mapping procedures, and the grassland studies were integral to the modeling and mapping process on the Project site. The methodology for vegetation mapping is described beginning on page 5.7-24, with further details of the methodology for delineation of grasslands provided beginning on page 5.7-25. The Draft EIR analyzes Project impacts to native grasslands and includes conservation measures to mitigate for losses.[3359]

[3356] DRP 2017, Table 5.7-2
[3357] *Id.,* Appendix 5.7-B
[3358] *Id.,* Table 5.7-2, p. 5.7-19
[3359] *Id.,* Sections 5.7.6 and 5.7.7

The following EIR Table 5.7-2 describes the extensive biological surveys conducted on the Project site to date:

TABLE 5.7-2
BIOLOGICAL SURVEYS CONDUCTED
ON THE PROJECT SITE (1999–2015)

Taxonomic Group	Surveyor	Survey Dates/ Season	Methods
Plants	BonTerra Psomas	March 23–April 5; May 25–June 5, 2015	Focused special status plant surveys throughout the impact area during the spring and summer (BonTerra Psomas 2015b).
		August 4, 2015	Vegetation mapping of the newly incorporated portion of the Project site (east of 300th St W).
	BonTerra Consulting	January–March 2009	Supplemental oak tree surveys south of SR-138 (BonTerra Consulting 2009a).
		March 2007	Vegetation mapping of the off-site impact areas (results provided in this document).
		August–September 2005	Vegetation mapping of areas west of the Aqueduct and the 262-acre portion south of SR-138 (results provided in this document).
	Natural Resource Consultants	April–August 2008	Special status plant surveys in the Project site and off-site mitigation areas (NRC 2008a).
		spring 2008	Grassland composition studies on the Project site and in off-site mitigation areas (NRC 2008b).
		spring 2007	Second year of grassland sampling of Project site (NRC 2007c).
		spring 2007	Regional grassland distribution assessment (NRC 2007a).
		April–June 2006	Grassland sampling study on the Project site (NRC 2006a, 2007b).
		April–June 2006	Special status plant survey of previously mapped populations (NRC 2006b).
	Tree Life Concern	June 2006–February 2007	Oak tree survey updated based on new impact area (Tree Life Concern 2008).
		July 2001–November 2001	Survey of all oak trees measuring 8 inches or greater in dbh, inside of or within 200 feet of identified Project grading boundary (Tree Life Concern 2003).
	Vollmar Consulting	April 1–11, June 23–27, 2003; April 15–24, June 10–13, 2004	Focused plant surveys throughout the site for special status species during the spring and summer (Vollmar Consulting 2004, revised 2006).
	Impact Sciences	March 2001–September 2001	Surveys for common and special status plant species concurrently with wildlife surveys and during the wetland and streambed delineation throughout many portions of the site (Impact Sciences 2002a, 2003).

TABLE 5.7-2
BIOLOGICAL SURVEYS CONDUCTED
ON THE PROJECT SITE (1999–2015)

Taxonomic Group	Surveyor	Survey Dates/ Season	Methods
	Paul Pruett & Associates	March 23, 27, April 3, June 15, 1999; April 25, 29, May 18, 2000	Focused plant surveys for special status species throughout the site (Impact Sciences 2003).
Jurisdictional Waters and Wetlands	BonTerra Psomas	June 2015	Updated jurisdictional delineation and functional assessment/CRAM including new areas (BonTerra Psomas 2015a)
	Glenn Lukos Associates	2008	Updated functional assessment of jurisdictional features (GLA 2009a).
		2008	Updated jurisdictional delineation assessment and report (GLA 2009b).
		May 2006–July 2006	Jurisdictional delineation of Phase One unimpacted areas and Future Phase areas; functional assessment of jurisdictional features (GLA 2006c).
		October 2005–November 2005	Jurisdictional delineation of Phase One areas (GLA 2005c).
	Impact Sciences	April 2001–August 2001	Preliminary jurisdictional delineation of Project site using USACE/CDFG delineation protocols (Impact Sciences 2002b).
Invertebrates	Glenn Lukos Associates	September 2006–January 2007	Dry-season protocol surveys for listed fairy shrimp species in 8 seasonal depressions (GLA 2007).
		October 2005–April 2006	Wet- and dry-season protocol surveys for listed fairy shrimp species in potentially suitable locations in the impact area west of the Aqueduct and the 262-acre portion south of SR-138 (GLA 2006a, 2006d).
		October 2005	Habitat assessment surveys for listed fairy shrimp species throughout the proposed impact area west of the Aqueduct and the 262-acre portion south of SR-138 (GLA 2005b).
		2004/2005 Wet Season	Wet-season protocol surveys for listed fairy shrimp species at 2 locations (GLA 2005a).
	Guy Bruyea	May 2004–September 2004	Same goals and emphasis as the 2001 surveys (see below), but a larger geographic area was surveyed (Bruyea Biological Consulting 2004).
		May 2003–August 2003 (5 days)	Same goals and emphasis as the 2001 surveys (see below), but a larger geographic area was surveyed (Bruyea Biological Consulting 2003).
		May 2001–August 2001 (5 days)	Surveys within potentially suitable areas of the site for special status butterfly species and adult and larval host plants potentially occurring on or

TABLE 5.7-2
BIOLOGICAL SURVEYS CONDUCTED
ON THE PROJECT SITE (1999–2015)

Taxonomic Group	Surveyor	Survey Dates/ Season	Methods
			near the site (Bruyea Biological Consulting 2001).
	Impact Sciences	March 2001	Non-protocol surveys for fairy shrimp at select locations. Under a USFWS permit, sampled several areas of potentially suitable habitat (i.e., vernal or seasonal pools and cattle ponds). Collected specimens with hand nets and identified them using a hand lens. Specimens were sent to Mr. Brent Helm, a fairy shrimp expert, for species confirmation (Impact Sciences 2001c).
Herpetofauna	BonTerra Consulting	February 2006 – June 2006	Focused protocol surveys for arroyo toad, red-legged frog, and Tehachapi slender salamander in areas west of the Aqueduct and the 262-acre portion south of SR-138 (results provided in this document).
		Spring and Summer 2005	Focused surveys for western spadefoot in potentially suitable areas west of the Aqueduct and the 262-acre portion south of SR-138 (BonTerra Consulting 2005).
	Impact Sciences	June 2004	Surveys for western spadefoot in potentially suitable areas of the site (Impact Sciences 2004b).
		June 2–6, June 30–July 3, July 7–12, 2003	Surveys and specific searches for special status amphibian and reptile species in potentially suitable areas of the site (Impact Sciences 2003).
		March 23, April 12, 23, 30, May 12, August 2001	Surveys and specific searches for special status amphibian and reptile species. USFWS protocol-level surveys for California red-legged frog. Surveys for two-striped garter snake and western pond turtle were conducted concurrent with frog surveys in potentially suitable areas of the site (Impact Sciences 2001a).
		May 27, 2000	General biological surveys for amphibians and reptiles conducted simultaneously with more focused survey efforts in potentially suitable areas of the site (Impact Sciences 2003).
	Paul Pruett & Associates	March 23, 27, April 3, 15, 20, 1999; April 21–29, May 1, 3, 13 2000	General biological surveys that included amphibian and reptile surveys in potentially suitable areas of the site (Impact Sciences 2003).

TABLE 5.7-2
BIOLOGICAL SURVEYS CONDUCTED
ON THE PROJECT SITE (1999–2015)

Taxonomic Group	Surveyor	Survey Dates/ Season	Methods
Birds and Mammals	BonTerra Psomas	July 2015	Update to the 2009 California condor assessment (BonTerra Psomas 2015d)
		March–July 2015	Focused surveys for tricolored blackbird (BonTerra Psomas 2015c)
		March – July 2013	Focused surveys for Swainson's hawk (BonTerra Psomas 2013)
	BonTerra Consulting	February–April 2010	Focused surveys for mountain plover (BonTerra Consulting 2010).
		April 2008–July 2008	Focused protocol surveys for least Bell's vireo and southwestern willow flycatcher (BonTerra Consulting 2008).
		April 2006–July 2006	Focused protocol surveys for least Bell's vireo and southwestern willow flycatcher (BonTerra Consulting 2006b).
		March 2006–July 2006	Focused protocol surveys for California spotted owl (BonTerra Consulting 2006a).
	Peter Bloom	spring–summer 2007	California condor records review, habitat assessment, and impact assessment (Peter Bloom 2009).
	Natural Resource Consultants	April 2006	Burrowing owl surveys in select areas of the Project site and mitigation lands (NRC 2006c).
	Ecological Sciences	May 2006–July 2006	Focused surveys for Tehachapi pocket mouse in the Phase One areas (Ecological Sciences 2006).
		2005	Small mammal trapping survey conducted at the Centennial site (Ecological Sciences 2005).
	Impact Sciences	June 2–6, June 30–July 3, July 7–12, 2003	Surveys for special status bird species; focused burrowing owl surveys conducted in potentially suitable areas of the site (Impact Sciences 2003).
		October 2–5 and 9–12, 2001	Small mammal species were trapped with Sherman live traps in potentially suitable sample areas representative of all habitat types on the site (Impact Sciences 2003).
		March 2001–October 2001	Special status bird and mammal species were noted during general reconnaissance and focused surveys for plants, amphibians, and reptiles (Impact Sciences 2003).
	Dave Crawford	June 3–7, 2003	Small mammal species were trapped with Sherman live traps in sample habitat areas primarily located east of the Aqueduct (Crawford 2003).

TABLE 5.7-2
BIOLOGICAL SURVEYS CONDUCTED
ON THE PROJECT SITE (1999–2015)

Taxonomic Group	Surveyor	Survey Dates/ Season	Methods
	Paul Pruett & Associates	March 23, 27, April 3, June 15, 1999; April 25, 29, May 18, 2000	Wildlife surveys conducted concurrent with plant surveys in potentially suitable areas of the site (Impact Sciences 2003).
Wildlife Movement	BonTerra Consulting	Spring 2007	Wildlife movement assessment of on-site areas to update baseline data and expected movement areas (results provided in this document).
		2005	Review of previous studies and analysis of topographic maps and aerial photographs of the vicinity (results provided in this document).
	Trust for Public Lands	2004–2005	Review of Tejon Ranch lands to develop a proposed 100,000 acre preserve (TPL 2004).
	Pioneer Environmental Services	2004	Wildlife movement study of Tejon Ranch lands including the Project site (Pioneer Environmental Services 2004).
	Dr. Paul Beier	2002	Tejon Ranch landscape connectivity study, including the Project site (Beier 2003).
	Impact Sciences	September and October 2001	Regional habitat connectivity assessment conducted with use of aerial photographs, topographic maps, and field reconnaissance. Track surveys in riparian zones (Impact Sciences 2001b).

SR: State Route; dbh: diameter at breast height; CRAM: California Rapid Assessment Method; USACE: U.S. Army Corps of Engineers; USFWS: U.S. Fish and Wildlife Service

Sources: The survey reports listed in this table are included in Appendix 5.7-B.

For expanded discussions and detailed methodologies, please refer to these reports contained in EIR Appendix 5.7-B.

In addition to the many surveys described above, third-party data, such as the scientific biological resources information developed as part of the Tejon Ranch Land Use and Conservation Agreement (Ranch-Wide Agreement or RWA) between Tejon Ranch and the Sierra Club, Natural Resource Defense Council, California Audubon Society, Endangered Habitats League, and Planning and Conservation League; the biological resource information developed and used in environmental impact reports (EIRs) for areas that include the Project site such as the Antelope Valley Area Plan EIR (Los Angeles County), the Northwest SR-138 Corridor Improvement Project EIR (Caltrans), and the 2012 and 2016 Regional Transportation/Sustainable Communities Strategy EIRs (SCAG); and relevant third-party scientific literature is cited in the extensive bibliography included in Section 5.7, Biological Resources, of the Draft EIR.[3360] Given the Project's consistency with the County's Antelope

[3360] DRP 2017, Section 5.7.9, p. 5.7-195

Valley Area Plan and both the 2012 and 2016 Regional Transportation/Sustainable Communities Strategy planning documents, the Project impact on biological resources have been analyzed in at least three different environmental impact reports in addition to the Centennial EIR. Given this history and the nearly two decades of biological study of the Project site, any suggestion that the EIR's biological determinations are based on insufficient scientific data is without merit.

This comment does not specifically address the adequacy of the EIR, and therefore no further response is required.

ADD-F.14

PALMDALE REGIONAL
MEDICAL CENTER

38600 Medical Center Drive | Palmdale, CA 93551 | (661) 382-6600

July 6, 2018

Jodie Sackett
Department of Regional Planning
320 West Temple Street, Floor 13
Los Angeles, CA 90012

Dear Mr. Sackett,

This letter of support and encouragement is in regards to the Centennial development at Tejon Ranch located near the junction of state highway 138 and interstate 5.

Palmdale Regional Medical Center ("PRMC") is the region's newest and only private bed (184) hospital in the Antelope Valley and continues to be rated as the hospital with the highest quality outcomes in the region by outside agencies such as Leapfrog and Women's Choice Award. In 2017 PRMC admitted 9,178 patients, treated 74,238 patients in the emergency room and performed 7,364 surgeries. PRMC is dedicated to providing quality care, delivering innovative service and exceeding expectations in healthcare since it opened in December 2010.

PRMC is owned by Universal Health Services, Inc. ("UHS"). UHS is one of the nation's largest hospital companies operating, through its subsidiaries, 350 acute care hospitals, behavioral health facilities and ambulatory centers located throughout the United States, the United Kingdom, Puerto Rico and the U.S. Virgin Islands. Listed on the New York Stock Exchange, UHS reported $10.4 billion in revenue and $725.4 million in net income in 2017. UHS was founded in 1979 by Alan B. Miller, Chairman and CEO, and today has more than 83,000 employees. UHS maintains one of the strongest balance sheets and is rated among the highest in the hospital services industry by Moody's and Standard & Poor's. This strong capital position has enabled the company to develop and acquire many new facilities over the past few years.

ADD-F.14-1

PRMC has been following the progress of the Centennial development at Tejon Ranch for some time. This development is sorely needed to help alleviate the housing shortage in the Antelope Valley. Recently, I have had discussions with Nathan Keith, Director of Planning, Real Estate at Tejon Ranch. PRMC and Tejon Ranch both share a vison that the new development at Centennial would be an ideal location for a future medical facility. With a planned development of 19,333 homes, the future residents at Centennial would need access to local, quality healthcare facilities and PRMC/UHS would study the possibility of opening such facilities in the development.

We look forward to the completion of the Centennial development.

Best regards,

Sean P. Morrisroe

Sean P. Morrisroe
Director, Business Development
sean.morrisroe@uhsinc.com

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SEP -7 PM 3:31

RECEIVED
2018 JUL -9 PM 3:31
DEPT OF REGIONAL PLANNING

Response to Comment Letter ADD-F.14
Palmdale Regional Medical Center
July 6, 2018

Response to Comment ADD-F.14-1:

Thank you for your participation in this public process. The Commenter's support for the Project and desire to locate a future medical facility in the Project is noted and this comment will be provided to the Regional Planning Commission and Board of Supervisors for consideration. This comment does not address the adequacy of the EIR and, therefore, no further response is required.

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From: King, Katherine <king@humnet.ucla.edu>
Sent: Wednesday, August 15, 2018 11:40 PM
To: Rosie Ruiz
Cc: Jodie Sackett
Subject: Centennial project material for Planning Commission

Tri-County Watchdogs PO Box 6407 Frazier Park, CA 93222

15 August 2018

To: Commissioners David W. Louie, Pat Modugno, Elvin W. Moon, Laura Shell, and Doug Smith
Los Angeles County Planning Commission

RE: **Centennial Project: Alternative E**

Dear Commissioners,

Tri-County Watchdogs has created an illustrated booklet about Quail Lake that we attach and ask you to read in conjunction with our request (previously submitted) that you consider Alternative E before voting to pass the Centennial Project on to the Board of Supervisors.

The booklet was created under the leadership of biologist Lynn Stafford with the help of local photographers and dedicated members of our organization. We hope it will show you the beauty and value of what will be lost if Centennial City stretches to the west of the aqueduct as planned on the original map.

ADD-F.15-1

Sincerely yours,

Katherine King, Secretary, Tri-County Watchdogs

Quail Lake Wildlife Habitat is in Danger

An important migratory bird stopover and habitat gem is threatened by Tejon Ranch Corporation's Centennial City Project, Especially Village 9

Quail Lake [BB]

In northern Los Angeles County at the extreme western end of the Antelope Valley, hills press down from the north and south towards a little lake. Slightly over a mile long and half a mile wide, Quail Lake's waters, shores and uplands host at least 150 species of birds.

Ruddy Ducks [BB]

American White Pelicans [BB]

ADD-F.15-1 cont.

The land around the lake is sparsely populated, with only three residences within one mile. Nonetheless, one can often see human visitors enjoying the lake along with the birds.

Fishing at Quail Lake, 2016 [BB]

Starting at a public parking lot at the western end off of Highway 138, a maintenance road circles the Lake, allowing public access for shore fishing, hiking, biking, birdwatching and photography.

ADD-F.15-1 cont.

Quail Lake, North Shore [BB]

Quail Lake was originally two ephemeral ponds created by cataclysmic action on the San Andreas Fault. They comprised one section of an important string of sag ponds in the region.

Gorman Post Sag Pond Three Miles East of Quail Lake on San Andreas Fault [BB]

By 1972, the California Department of Water Resources had constructed and filled a larger reservoir in the space of the two ponds. This reservoir, now called Quail Lake, has dual functions of conducting the West Branch California Aqueduct over the San Andreas Fault and providing a regulatory storage body for the water system.

ADD-F.15-1 cont.

Inlet to Quail Lake [BB]

Habitat of Quail Lake and Surrounding Uplands

Since the conversion of the two natural ponds into Quail Lake, the lake has developed several wetland wildlife habitats to compliment the surrounding natural and rural uplands. The lake consists primarily of open water with surrounding shoreline.

RC

Bald Eagle at Quail Lake [RC]

A few small islands and rocks are present. There are areas of steep, relatively bare banks separated by patches of emergent vegetation, mostly bulrushes. Above the shoreline in several locations are stands of riparian brush and trees.

Island in Quail Lake [BB]

ADD-F.15-1 cont.

Grass-covered fields to the immediate west, north and east belong to Tejon Ranch Corporation. A two-lane rural highway (Highway 138) near the south shore carries travelers to the Antelope Valley. South of the highway are brush and grass-covered hills and canyons.

Uplands Adjacent to Quail Lake [BB]

View Northwards onto Adjacent Tejon Ranch Corp Lands [BB]

California Poppies [BB]

ADD-F.15-1 cont.

These habitats in and adjacent to Quail Lake provide refuge for an abundance of wildlife.

Northern Harrier [BB]

Pronghorn [BB]

Western Meadowlark [BB]

Cliff Swallows collecting mud for nests [BB]

Bobcat [BB]

ADD-F.15-1 cont.

Quail Lake's Role Supporting California's Native Birdlife Populations: A Photographic study

For more than three years, local photographers Bill Buchroeder and Randy Cushman and biologist Lynn Stafford have documented wildlife at and adjacent to Quail Lake, with an emphasis on bird life.

Randy Cushman at Quail Lake [BB]

During this time, they have identified 133 species by photographs taken from the maintenance road surrounding the lake or from the shoreline. Undoubtedly even more species move through the area.

These photographs verify that Quail Lake and its immediate surroundings function as an important migration route and winter stopover as well as for summer breeding for many native bird species, many of whom have experienced a severe drop in population numbers in California due to human-related factors.

Blue-winged and Cinnamon Teal [RC]

ADD-F.15-1 cont.

Many hours of driving, hiking, searching, photographing and processing photographs, have revealed that Quail Lake is on an important flyway and that it also functions, in concert with the upland pastures nearby, as vital breeding grounds for several species, including at least one endangered species, the tri-colored blackbird.

BB

Tri-colored Blackbird [BB]

Migratory Bird Corridor Usage of Quail and Immediate surrounding Uplands

ADD-F.15-1 cont.

Many water, shore, and land bird species migrate between winter grounds south of the United States to summer breeding areas in California and further north as far as the Arctic coast of Canada and Alaska.

White-faced Ibis, Black-necked Stilt and American Avocet During Spring Migration [BB]

An important migratory route funnels birds from the Southern California deserts and the Salton Sea region through Antelope Valley past Quail Lake, through mountain gaps in the vicinity of Gorman, Lebec and Grapevine on north into the San Joaquin Valley and destinations still further north. In the fall of each year bird species return to their southern wintering grounds via the same route.

Migration Route Google Earth

At least sixty-eight species have been observed using Quail Lake and the surrounding uplands during migration. These species include loons, grebes, white pelicans, herons, egrets, ibis, swans, geese, at least 16 species of ducks, raptors, shorebirds and many songbirds. Notable numbers observed in migratory flocks include 200 white-faced ibis, 200 American white pelican and 500 common merganser. Quail Lake appears to be particularly attractive to fish-eating birds. Migrating sandpipers, plovers, stilts and avocets work the shoreline.

ADD-F.15-1 cont.

Greater Yellowlegs Resting During Migration [BB]

Migrating swallows ply the airways above the Lake for insects. Quail Lake provides an essential oasis stopover for birds traveling hundreds or thousands of miles during their biennial travels.

During the past hundred years or more, much of California's wetland habitat has been destroyed or degraded by human development. The few remaining natural wetlands and enhanced or created wetlands, such as Quail Lake are crucial for the survival of migratory birds.

Breeding Birds of Quail Lake

Several species of birds nest at or in immediate vicinity of Quail Lake. Human structures provide overhangs for colonies of cliff swallows.

Swallow Breeding Colony [BB]

Small groves of cottonwoods and willows harbor a variety of riparian species.

Raptor Nest in Cottonwood Tree [BB]

ADD-F.15-1 cont.

The patches of reed beds along the shore create a hidden world of marsh birds. These include three members of the rail family, the American coot, sora and Virginia rail.

Virgina Rail in Quail Lake Reeds [BB]

Marsh wrens, common yellowthroat (a wood warbler) and song sparrow also reside here. Red-winged blackbirds and possibly yellow-header blackbirds nest in these dense vegetation tangles. Of special conservation significance are the colonies of tri-colored blackbird.

Tri-colored Blackbird Nesting Colonies at Quail Lake

The tri-colored blackbird is found almost entirely within the state of California. It's numbers have plummeted with the development of wetlands, particularly in the Central Valley. Under consideration for Endangered status, it is the subject of regular population assessments by the University of California to determine its vulnerability to extinction.

At Quail Lake, two to four colonies were observed in the shoreline reed beds each summer from 2015-2017. The total individuals in these colonies probably number between 1000 and 2000 adult birds.

Unlike its close relative the common red-winged blackbird, the tri-color needs to exist in large colonies during nesting. This blackbird has a complex social dynamic. All females in one colony ovulate at the same time.

ADD-F.15-1 cont.

Tri-color blackbirds weave their nests close together between reed stems hanging over shallow water out of sight.

Tri-colored Blackbird Nesting Colony at Quail Lake
[BB]

While the females tend the nests, the males converse loudly, then all leave together to forage for insects in nearby pastures. They are known to travel as much as five miles in search of insects.

ADD-F.15-1 cont.

Tri-coloured Blackbird Males Foraging North of Quail Lake
[BB]

Because they nest in large colonies, tri-colored blackbird require abundant food resources close to each colony. The present situation at Quail Lake appears to be ideal. The reed beds are

undisturbed, and the Tejon Ranch pastures to the west, north and east of the Lake provide most of the food supply.

Blackbird Colony Close to Proposed Village 9 of Centennial City [BB]

The proposed Centennial City development will completely alter the surrounding uplands to the west, north and east of the Lake, whose pastures will disappear into residential subdivisions. This alteration will certainly destroy the existing breeding populations of tri-colored blackbirds. The widening of Highway 138 to accommodate this development will further degrade the potential for breeding by this species.

ADD-F.15-1 cont.

CEQA Alternative E

Although the building of Centennial City will do great permanent damage to the connectivity of natural ecosystems within California, will basically destroy the natural environmental qualities of Western Antelope Valley, and will have far-reaching ecosystem degradation effects on California, **Alternative E** would at least limit the damage to east of the aqueduct. It would preserve the important grassland hill habitat north of Quail Lake where the tri-colored blackbird forages, and it would allow Quail Lake to continue to function as an important breeding ground and migratory rest-stop for many species of birds.

Lynn Stafford, Biologist, Board Member, Tri-County Watchdogs

Bill Buckroeder [BB] and Randy Cushaman [RC], photographers

Tri-County Watchdogs

Response to Comment Letter ADD-F.15
TriCounty Watchdogs
August 15, 2018

Response to Comment ADD-F.15-1:

The Commenter's concern about the natural history of Quail Lake is noted. The Commenter has provided a document of photographs describing the species that currently utilize Quail Lake with the title "Quail Lake Wildlife Habitat is in Danger". The document describes the history of the lake, as well as photographs of wildlife and plants in the area. Species mentioned in the document include: the California poppy, ruddy duck, American white pelican, bald eagle, northern harrier, pronghorn antelope, western meadowlark, cliff swallows, bobcat, blue-winged and cinnamon teal, tricolored blackbird, white-faced ibis, black-necked stilt, American avocet, greater yellowlegs, Virginal rail, marsh wren, common yellowthroat, and song sparrow.

No direct Project impacts to Quail Lake are proposed; in fact, Village 9 is approximately 2,000 feet to the north. Indirect Project impacts to Quail Lake are included in the biological impacts section (Draft EIR Section 5.7.6). The Draft EIR acknowledges the migration of common bird species through the Project site on page 5.7-49 and analyzes the migration of individual special status species through the Project site beginning on pages 5.7-112 through 5.7-124, and 5.7-148 through 5.7-151. Additionally, please refer to response to Comment F.8-162 of the Final EIR regarding migratory birds.

The special status species mentioned in the comment (e.g. northern harrier, bald eagle, pronghorn antelope, and tricolored blackbird), are analyzed separately in the Special Status Wildlife section of Draft EIR Section 5.7.3, Environmental Setting. The northern harrier is discussed on pages 5.7-50, 5.7-92, 5.7-117, and 5.7-150 of the Draft EIR. The bald eagle is discussed on pages 5.7-88, 5.7-95, 5.7-120, 5.7-121, 5.7-145, and 5.7-148 of the Draft EIR, and at length in responses to Comments B.4-72 F.8-137, F.8-146, F.8-147, F.8-148 of the Final EIR. (Mitigation Measure 7-8 is provided to mitigate for potentially significant impacts to bald eagle.) Pronghorn antelope is discussed on pages 5.7-50, 5.7-54, 5.7-127, 5.7-128, and 5.7-153 of the Draft EIR, and at length in responses to Comments B.4-34, B.4-35, B.4-36, B.4-37, F.8-165, F.8-166, and F.8-167 of the Final EIR.

Regarding the tricolored blackbird breeding colony at Quail Lake, all permanent direct impacts to potential breeding ponds will be avoided as discussed in the Draft EIR. However, MM 7-7 has been revised in the Final EIR to require that all temporary impacts will be avoided within ¼ mile during the nesting season to avoid indirect effects during construction. No tricolored blackbird have been seen at the northern portion of the Project site in recent years; however, the permanent setback described for this species in MM 7-7 in Section 5.7, Biological Resources, on pages 5.7-178 and 5.7-179 will apply to both the Quail Lake use area as well as the pond use area in the northern portion of the Project site.

With respect to foraging habitat, the Draft EIR indicated that loss of foraging habitat could interrupt breeding if both Quail Lake and the north pond were used for breeding at the same

time. As noted above, it has been nine years since any tricolored blackbird were found at the north pond, the habitat has become severely degraded, and the area is not likely to become suitable in the future. The species routinely shifts breeding locations, and there are also existing suitable breeding locations within the Mitigation Preserve as described in Appendix 5.7-C of the Draft EIR, so the likelihood that both areas will be used for breeding at the same time is extremely low. Nevertheless, MM 7-7 has been modified to require a ¼ mile setback during breeding season, which will protect the existing foraging habitat for that season during construction, and the land use adjacent to Quail Lake up to approximately ½ mile is almost entirely open space recreation and, therefore, will be permeable and available for foraging. Please also see discussion of coordination with CDFW in response to Comment B.4-1.

Tricolored blackbird is discussed on pages 5.7-19, 5.7-112 through 5.7-114, 5.7-116, 5.7-145, 5.7-148, 5.7-149, 5.7-150, 5.7-151, and 5.7-154 of the Draft EIR, and at length in responses to Comments B.4-18, B.4-43, B.4-70, F.3-14, F.3-15 through F.3-20, F.3A-23 through F.3A-29, F.7-22, F.8-117, F.8-156, and F.8-158 of the Final EIR. A separate tricolored blackbird report is also attached (Draft EIR Appendix 5.7-B) that documents breeding at Quail Lake. The potential impacts to tricolored blackbird associated with the widening of SR-138 (including potential impacts to Quail Lake nesting habitat) were analyzed by Caltrans in the Northwest State Route 138 Corridor Improvement Project Final Environmental Impact Report/Environmental Impact Statement (Caltrans EIR).[3361] The Caltrans EIR, which assumes development Project, determined that, with mitigation, impacts to tricolored blackbird associated with State Route 138 Corridor Improvement Project activities would not be significant.[3362]

The comment does not present evidence indicating that the Draft EIR's analysis of impacts to Quail Lake biological resources, including special status species, was inadequate.

With respect to the Commenter's recommendation to select Alternative E, the Commenter's preference is noted and will be provided to the Regional Planning Commission and Board of Supervisors for consideration. The Commenter has previously expressed this preference in much more detail, and the County has responded appropriately. For detailed responses, please see Supplemental Staff Memo to RPC 8-16-18, Attachment G – Responses to Hearing Testimony, at Responses RPC-70 through RPC-74, available at http://planning.lacounty.gov/assets/upl/case/sp_02-232_pm060022-20180816-attH2.pdf; and Attachment H – Responses to Additional Correspondence Received through August 13, 2018, at Responses to Comments ADD-F.13-2 through ADD-F.13-8, available at http://planning.lacounty.gov/assets/upl/case/sp_02-232_pm060022-20180816-attH5.pdf.

[3361] Caltrans EIR at 380
[3362] *Id.*

CALIFORNIA
NATIVE PLANT SOCIETY

August 17, 2018

Los Angeles County Regional Planning Commission
Department of Regional Planning
320 West Temple Street
Los Angeles, CA 90012
(213) 974-6411
Submitted via email to: rruiz@planning.lacounty.gov and
sackett@planning.lacounty.gov

Dear Los Angeles County Regional Planning Commission,

Thank you for the continued opportunity to engage in the very important dialogue related to the proposed Centennial Specific Plan. The scale of this project and the habitats that are threatened make this a project of utmost importance to the California Native Plant Society.

The California Native Plant Society ("CNPS") is a non-profit environmental organization with nearly 10,000 members in 35 local chapters. CNPS' mission is to protect California's native plant heritage and preserve it for future generations through application of science, research, education, and conservation. CNPS works closely with decision-makers, scientists, and local planners to advocate for well-informed and environmentally friendly policies, regulations, and land management practices.

During our review of testimony presented at past Regional Planning Commission hearings on Centennial and continued analysis of the Centennial Specific Plan FEIR we have uncovered some issues that need to be addressed ahead of the August 29 hearing.

ADD-F.16-1

Issue 1: Misrepresentation of the Tejon Ranchwide Agreement

In 2008, Tejon Ranch Company (TRC) entered into an agreement with five environmental organizations, the Sierra Club, Endangered Habitats League, Audubon of California, Natural Resources Defense Council, and Planning and Conservation League.

The complete text of the Ranchwide Agreement is available at:
https://www.sec.gov/Archives/edgar/data/96869/000119312508138009/dex1028.htm

In testimony at public hearings of the Regional Planning Commission, TRC has repeatedly misrepresented the nature of this agreement by implying that the five environmental organizations party to the 2008 Ranchwide Agreement support TRC's

ADD-F.16-2

proposed development actions. For example, on June 6, at the Regional Planning Commission hearing, Greg Medeiros, TRC Vice President Community Development, stated that Centennial "complies and conforms and is consistent with all of the scientific work done by the Sierra Club, NRDC, and other signatories of the Ranchwide Agreement. Boundaries were drawn. This site fits inside of the place where people think, okay. This is where development should go. To meet our needs, this is where development should go. What is around it should be preserved."

This statement is simply not accurate. The primary product of TRC's Ranchwide Agreement with the five environmental organizations was for these groups to "not oppose the development of the Projects, or any of the Project Approvals, consistent with the terms of the Agreement." See Ranchwide Agreement Exhibit S pages 1-4.

It is important for the Regional Planning Commission and Board of Supervisors to recognize that an agreement to "not oppose" is not equivalent to support. The Centennial Specific Plan does not have broad support of the environmental community or any other community for that matter.

ADD-F.16-2-cont.

Issue 2: The Mitigation Preserve Design in the FEIR is Inadequate

For the latest version of the mitigation preserve design proposed by TRC for the Centennial Specific Plan please see PDF pages 1455-1457 in FEIR Volume 2: http://planning.lacounty.gov/assets/upl/case/sp_02-232_pm060022-feir-2.pdf. Please see the map labeled Exhibit 5.7-10 on pdf page 1455.

This version of the mitigation preserve supersedes the previous version presented in DEIR Appendix 5.7 pages 136-138 and Exhibit 5.7-10. A notable difference between the DEIR and FEIR is the addition of a large area of proposed mitigation land to the east of the project site in Area 7 (FEIR pdf page 1455).

In order to evaluate the adequacy of the mitigation preserve design CNPS conducted a GIS exercise that involved manually digitizing FEIR Exhibit 5.7-10 and analyzing proposed mitigation areas in relation to existing conservation easements. A GIS map of conservation easements on Tejon Ranch was obtained from the National Conservation Easement Database: https://www.conservationeasement.us/.

The following maps and table show quite clearly that TRC is relying heavily on lands already preserved with conservation easements for its mitigation preserve design. A brief description of each map follows:

Map 1: Shows areas proposed as mitigation by TRC in green with area numbers corresponding to those in FEIR Exhibit 5.7-10. Areas covered by existing conservation easements appear as black-hashed lines.

Map 2: Shows the current land use designation for each of the areas in the mitigation preserve. Areas in yellow are "Onsite mitigation", those in red are offsite mitigation

ADD-F.16-3

areas that occur within conservation easements, and those that are in green are offsite mitigation areas that are outside of the areas covered by conservation easements.

Map 3: Maps the grassland habitat in the proposed mitigation preserve. These areas were digitized to the best of our ability, but the complex nature of the polygons in FEIR Exhibit 5.7-10 mean that there may be some small differences between Map 3 and the grassland map in the FEIR.

The table below and Map 1 summarize the acreage and land use designation in the Centennial Mitigation Preserve:

Mitigation Areas	Grassland Acreage	Total Acreage	Acreage in Easements	Grassland Acreage in Easements
On-site				
North	1899	2898	0	0
South	90	968	0	0
Sub-total	1989	3866	0	0
Off-site				
Area 1	1734	6497	1340	90
Area 2	1597	2556	0	0
Area 3	3059	4183	4183	3059
Area 4	4494	7319	6480	3865
Area 5	643	643	643	643
Area 6	1005	2429	0	0
Area 7	7877	15668	3126	1440
Sub-total	20409	39295	15772	9097
Total	**22398**	**43161**	**15772**	**9097**
Percentage of Total in Easements	**36.5**			
Percentage of Grassland in Easements	**40.6**			

A total of 36.5 percent of all land in the mitigation preserve is already covered by conservation easements. The Ranchwide Agreement provided "an option to purchase conservation easements over an additional 62,000 acres of Tejon Ranch" (see Ranchwide Agreement, page 1). These 62,000 acres, in addition to the 178,000 acres conserved as part of the Ranchwide Agreement sum to 240,000 acres, or 88.9% of the land owned by TRC. In 2010, the state's Wildlife Conservation Board (WCB) agreed to purchase 62,000 acres of TRC land using 15.8 million taxpayer dollars (see WCB

ADD-F.16-3 cont.

minutes from November 2010, see Attachment 1_WCBminutes.pdf). Areas in the Centennial mitigation preserve include portions of the Bi-Centennial and Tri-Centennial Easements and correspond to mitigation Areas 3, 4, and 5 in the mitigation preserve (see 5.7-10 and Map 1). The land within the mitigation preserve that was purchased by WCB amounts to 11,306 acres or 29% of the total offsite mitigation acreage. An additional, 10,000 acres of easements were acquired in 2014 to accommodate the re-routing of the Pacific Crest Trail (PCT) on Tejon Ranch (see http://www.latimes.com/travel/deals/la-trb-tejon-ranch-pacific-crest-trail-20140506-story.html). Areas proposed for offsite mitigation within the PCT easement total 4,466 acres. Combined, areas covered by existing easements total 15,772 acres, or 36.5% of the mitigation preserve.

ADD-F.16-3 cont.

FEIR Volume 2 (pdf page 1456), states that areas covered by existing easements are "available for mitigation activities that include enhancement, restoration, or creation, are not available for preserved mitigation acreage since the existing Conservation Easement already requires preservation." To our knowledge, TRC has yet to detail the enhancement, restoration, or creation that it intends to complete on these lands. Furthermore, has TRC detailed which, if any, of the areas within the WCB easements needs these actions? This leads us to question why these areas are even being considered as part of the mitigation preserve? Has the WCB, which provided the taxpayer funds to purchase these easements, been contacted about the use of these lands as part of TRC's Centennial mitigation preserve? Are these areas simply being included to augment the number of acres used for mitigation, possibly to increase, on paper, the mitigation to disturbed area ratio? Are these lands included to simply make the lands available for mitigation look more robust than they actually are? For a picture of what the mitigation preserve actually looks like if more accurately depicted please refer to Map 2, in which areas already covered by conservation easements are depicted in red.

ADD-F.16-4

ADD-F.16-5

ADD-F.16-6

Furthermore, we continue to have serious concerns about the ability of TRC to mitigate for the loss of grassland habitats on Centennial. The rich nature of the grassland habitats on Centennial have been detailed in the study by Vollmar Consulting from 2003-2004 (See Attachment2_VollmarReport.pdf). In this report, Vollmar details the native grassland and wildflower habitats as the product of a variety of environmental factors endemic to Centennial. These factors include geologic origin, soil texture, topographic position in the landscape and climate. Map 3 details the distribution of grassland habitats in the mitigation preserve. This map makes it entirely clear that a large proportion of the grassland habitats proposed as mitigation, approximately 9,000 acres (40% of the grassland total), is located within land covered by existing easements. The addition of the eastern portion of Area 7 in the FEIR increases the amount of grassland mitigation acreage by 7,877 acres. Given that the quality of grassland habitats within Centennial is related to a combination of environmental factors, we question the comparability of these habitats with those to the Ares 6 and the eastern portion of Area 7. Has TRC provided a scientifically-defensible analysis of grassland habitats in Area 6 and the eastern area of 7 with those on Centennial?

ADD-F.16-7

ADD-F.16-8

From my own observations, having done botanical research on Tejon Ranch for more than four years as part of my dissertation, I can conclusively say that environmental factors and habitats change quite dramatically as one travels east along the foothills of the Tehachapi Mountains. Habitats become drier and more influenced by Mojave Desert vegetation as one travels east from Centennial. A striking example of this is the absence of Joshua tree (*Yucca brevifolia*) on Centennial and its prevalence farther to the east. The composition of perennial grasslands also changes as one travels from west to east. For example, grassland habitats dominated by nodding needlegrass (*Stipa cernua*) in the foothills of the western Tehachapi Mountains give rise to grasslands dominated by desert needle grass (*Stipa speciosa*) to the east. How can the grassland habitats in the eastern part of Mitigation Area 7 and Area 6 serve adequately as mitigation for the loss of grassland habitats on Centennial? Empirically, there are also numerous examples of plant species that are not known from east of Big Sycamore Canyon, which is roughly in line with the eastern edge of Centennial. I have hypothesized that this is related to microclimatic patterns, which result in higher annual precipitation rates to the west of this "divide." If TRC wants to use land in the eastern portion of Tejon Ranch to mitigate for the loss of habitat on Centennial they should be required to prove that these lands are equivalent using reproducible methods with the results published in peer-reviewed journals.

ADD-F.16-8 cont.

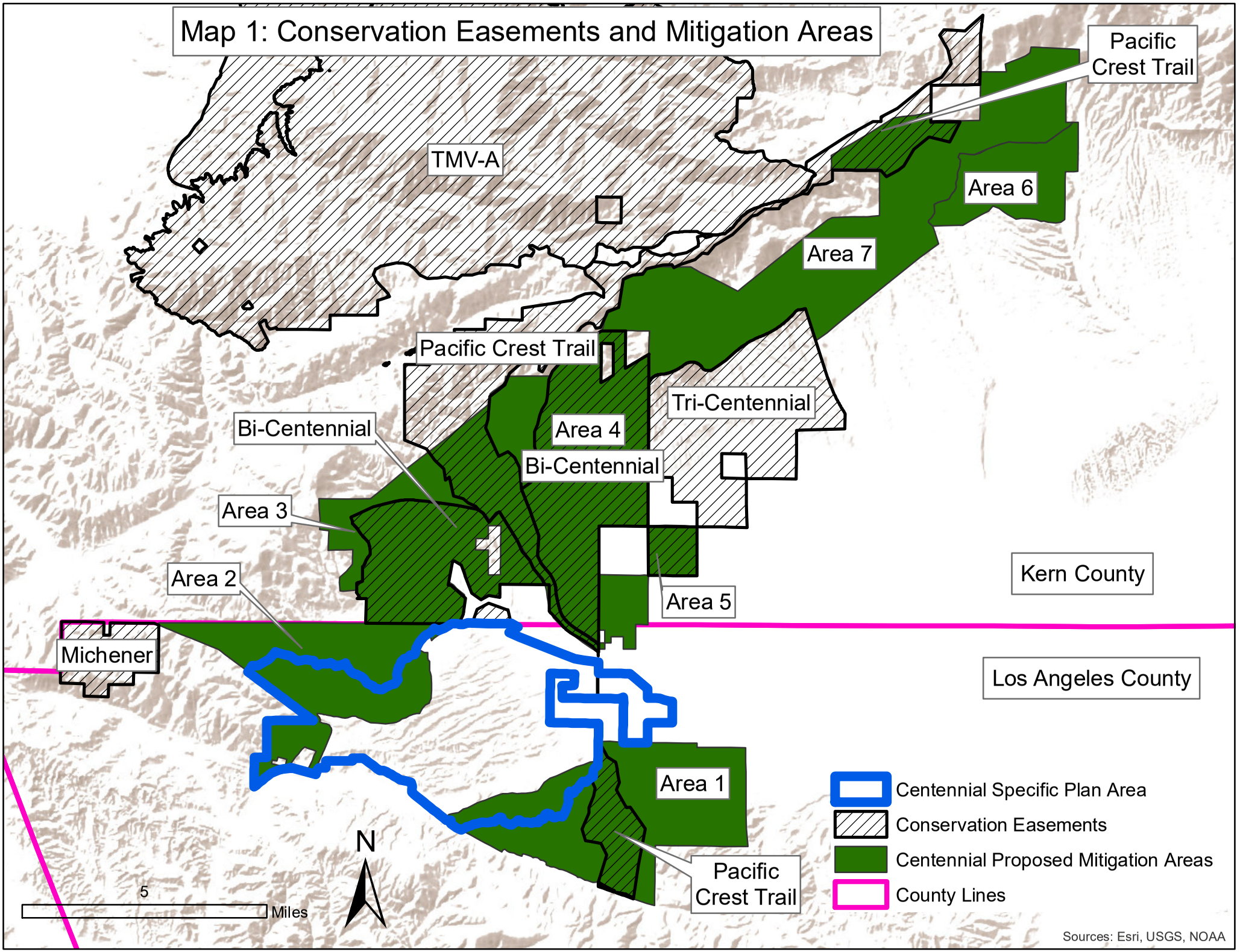
ADD-F.16-9

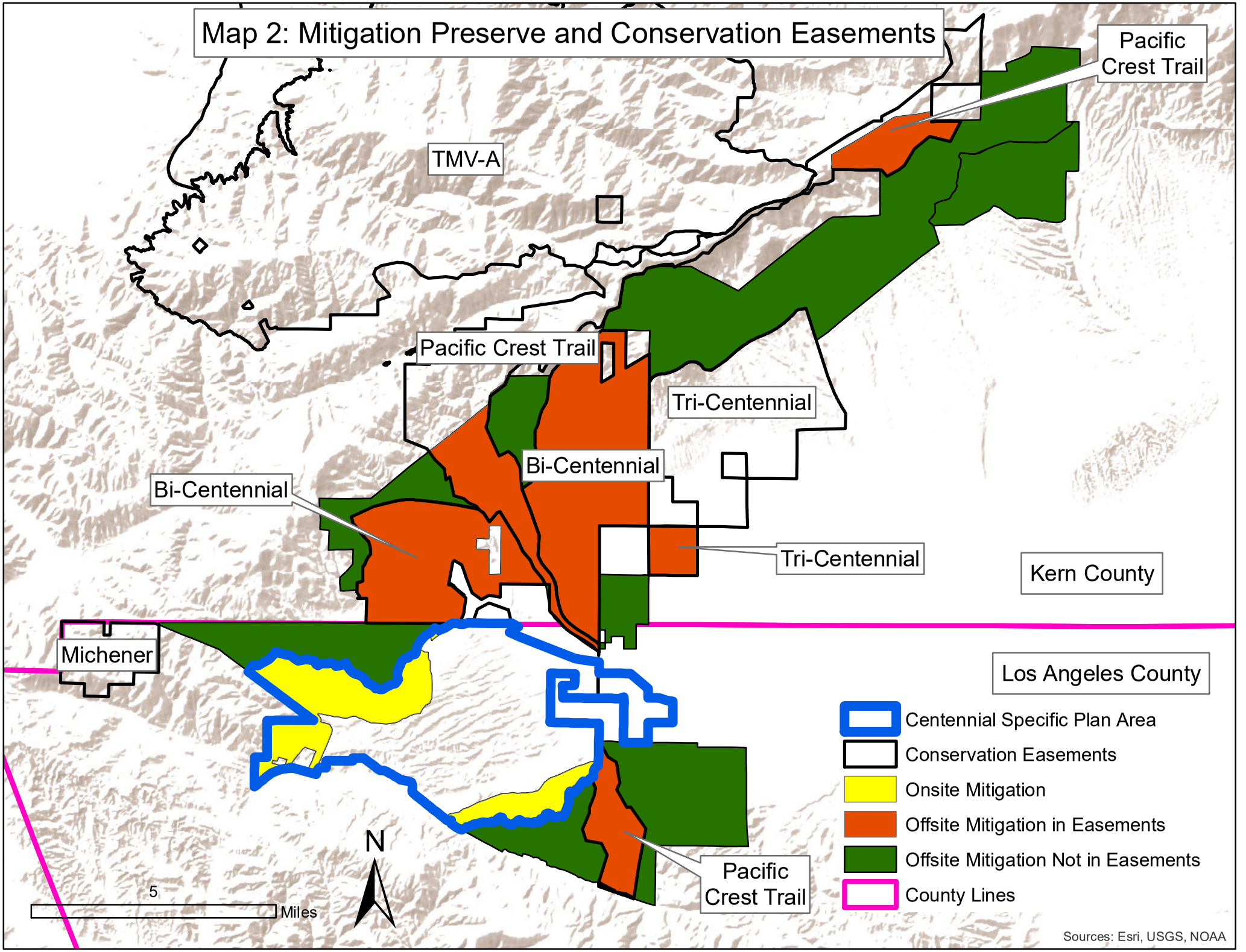
In summary, TRC has presented a mitigation proposal that includes more than 15,000 acres of land that have already been spoken for, in that they are already covered by existing conservation easements. Additionally, the use of the eastern portion of Area 7 and Area 6 to mitigate for habitat losses on Centennial is dubious and merits further study. When these eastern habitats are taken away from mitigation preserve along with the 15,772 acres of lands already covered by conservation easements does TRC have a viable mitigation preserve? Numerous scientists have detailed the unique and special nature of the habitats on Tejon Ranch. Among these special habitats, the grasslands on Centennial are exemplary, unique, and irreplaceable. Given the value of these habitats, a more creative and comprehensive mitigation preserve design is warranted. Until this is prepared by TRC, the design presented in the FEIR should be deemed inadequate.

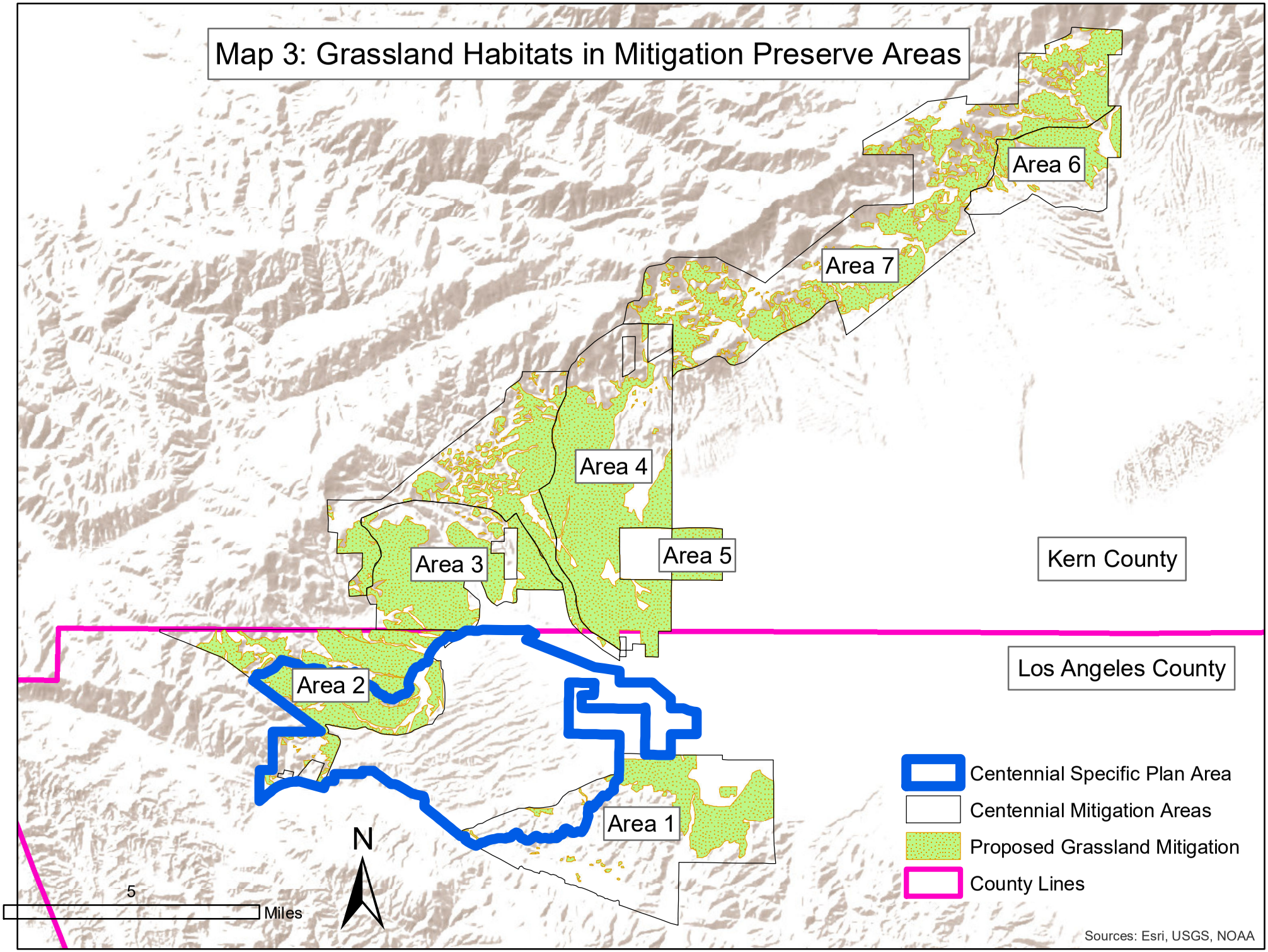
ADD-F.16-10

Sincerely,

Nicholas Jensen, PhD
Southern California Conservation Analyst
California Native Plant Society
1500 North College Ave
Claremont, CA 91711
(530) 368-7839
njensen@cnps.org


Map 1: Conservation Easements and Mitigation Areas
Pacific Crest Trail
TMV-A
Area 6
Area 7
Pacific Crest Trail
Tri-Centennial
Bi-Centennial
Area 4
Bi-Centennial
Area 3
Area 2
Kern County
Area 5
Michener
Los Angeles County
Area 1
Pacific Crest Trail
N
5
Miles
Centennial Specific Plan Area
Conservation Easements
Centennial Proposed Mitigation Areas
County Lines
Sources: Esri, USGS, NOAA


Map 2: Mitigation Preserve and Conservation Easements
Pacific Crest Trail
TMV-A
Pacific Crest Trail
Tri-Centennial
Bi-Centennial
Bi-Centennial
Tri-Centennial
Kern County
Michener
Los Angeles County
Centennial Specific Plan Area
Conservation Easements
Onsite Mitigation
Offsite Mitigation in Easements
Offsite Mitigation Not in Easements
County Lines
Pacific Crest Trail
N
5
Miles
Sources: Esri, USGS, NOAA


Map 3: Grassland Habitats in Mitigation Preserve Areas
Area 6
Area 7
Area 4
Area 3
Area 5
Kern County
Los Angeles County
Area 2
Area 1
N
5
Miles
Centennial Specific Plan Area
Centennial Mitigation Areas
Proposed Grassland Mitigation
County Lines
Sources: Esri, USGS, NOAA

ATTACHMENT 1

WILDLIFE CONSERVATION BOARD
MINUTES

DEPARTMENT OF FISH AND GAME
WILDLIFE CONSERVATION BOARD
1807 13TH STREET, SUITE 103
SACRAMENTO, CALIFORNIA 95811
(916) 445-8448
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State of California
Natural Resources Agency
Department of Fish and Game
WILDLIFE CONSERVATION BOARD
Minutes
November 18, 2010

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* Proposed Consent Calendar

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WILDLIFE CONSERVATION BOARD

Minutes

November 18, 2010

The Wildlife Conservation Board met on Thursday, November 18, 2010, at the State Capitol, Room 4203 in Sacramento, California. Mr. John McCamman, Director of the Department of Fish and Game, called the meeting to order at 10:00 A.M., introduced himself, Ms. Karen Finn, Program Budget Manager, Department of Finance; Ms. Diane Colborn, Assembly Member Jared Huffman's representative; Ms. Erin Shaw, Assembly Member Ira Ruskin's representative; Mr. John Donnelly, Executive Director of the Wildlife Conservation Board, and Ms. Natalya Kulagina, Mr. Donnelly's Executive Assistant. Mr. McCamman turned the meeting over to Mr. Donnelly.

1. Roll Call

WILDLIFE CONSERVATION BOARD MEMBERS

John McCamman, Chairman
Director, Department of Fish and Game

Karen Finn, Program Budget Manager
Vice, Ana Matosantos, Member
Director, Department of Finance

JOINT LEGISLATIVE ADVISORY COMMITTEE

Senator Fran Pavley

Teresa Schilling
Vice, Senator Patricia Wiggins

Diane Colborn
Vice, Assembly Member Jared Huffman

Erin Shaw
Vice, Assembly Member Ira Ruskin

EXECUTIVE DIRECTOR

John P. Donnelly

Wildlife Conservation Board Staff Present:

John P. Donnelly, Executive Director
Dave Means, Assistant Executive Director
Peter Perrine, Assistant Executive Director
Scott McFarlin, Public Land Management Specialist IV
Debbie Townsend, Senior Land Agent (R.A.)
Natalya Kulagina, Executive Assistant
Liz Yokoyama, Senior Land Agent
Janell Bogue, Staff Counsel
Nancy Templeton, Staff Counsel
Brian Gibson, Senior Land Agent
Robert Kane, Senior Land Agent (R.A.)
Tony Chappelle, Public Land Management Specialist IV
William Gallup, Senior Land Agent
Erin Ingenthron, Office Technician
Jasen Yee, Associate Budget Analyst
Dawn Drowne, Staff Services Analyst
Chad Fien, Public Land Management Specialist IV
Roland Shield, Research Analyst I
Ashley Lackey, Staff Services Analyst
Celestial Baumback, Office Technician
Mary Westlake, Staff Services Analyst
Teri Muzik, Senior Land Agent
Jon Wilcox, Senior Land Agent
Scott Clemons, Public Land Management Specialist IV (R.A.)
Marilyn Cundiff, Public Land Management Specialist IV

Others Present:

Andy Atkinson, Department of Fish & Game
Eric Haney, Department of Fish & Game
Julie Horenstine, Department of Fish & Game
Jennifer Navicky, Department of Fish & Game
Kent Smith, Department of Fish & Game
Larry Wyckoff, Department of Fish & Game
Carl Studebaker, Department of Fish & Game (retired)
Todd Ferrara, Natural Resources Agency
E. J. Remson, The Nature Conservancy
Gregg Werner, The Nature Conservancy
Marlyce Myers, The Nature Conservancy
Chris Fischer, The Nature Conservancy
Trish Strickland, Trust for Public Land
David Sutton, Trust for Public Land
Erik Vink, Trust for Public Land
Taylor Mee-Lee, Trust for Public Land
Tasha Newman, CA Strategy Group
Catherine Koehler, UC Davis
Pat Dyas, Wildlife Conservation Board (retired)
Bill Burrows, Red Bluff, CA
Tory Burrows, Red Bluff, CA
Bob King, TRI Commercial
Athena Shlien, Malibu, CA
Jamison Watts, North Coast Regional Land Trust
Joel Reynolds, Natural Resources Defense Council
Dave Burrows, Cottonwood, CA
Duncan Estabrook, Red Bluff, CA
Susan Schohr, Schohr Ranch, Inc.
Suzanne Goode, Department of Parks & Recreation
Roberta Marshall, DMB Associates
Edward Stanton, American Land Conservancy
Melinda Marks, San Joaquin River Conservancy
Tom Maloney, Tejon Ranch Conservancy
Eileen Reynolds, Tejon Ranch
Rob Stine, Tejon Ranch
Derek Abbott, Tejon Ranch
Allen Lyda, Tejon Ranch
Kathleen Parkinson, Tejon Ranch
Paul Hardy, Feather River Land Trust
David Newbert, General Public
Gretchen Lieff, General Public
Marcia Hanscom, Wetlands Defense Fund
Dan Taylor, Audubon California
Frank Giordano, Member of Public
Vicky Dawley, Big Bluff Ranch
Wendy Sherman, Big Bluff Ranch
Frank Dawley, Big Bluff Ranch
Julie Taylor, Big Bluff Ranch
Adele Pommerenck, Penn Valley, CA
Paul Aigner, UC Davis
Lauren Ward, Sonoma, CA
Holly Dawley, Redding, CA
Suzanne Easton, BRBNA Conservation Partnership
Joseph Bride, Eagles Nest Cattle
Tara Burrows, Red Bluff, CA
Wendy Sherman, Red Bluff, CA
Lynne Gould, Greenfield, CA
Chris McArthur, McArthur, CA

Others Present (continue):

Mary Small, State Coastal Conservancy
Kara Kemmler, State Coastal Conservancy
George McArthur, McArthur, CA
Mark Abramson, Santa Monica Bay Restoration Foundation

Mr. Donnelly welcomed everyone to the Wildlife Conservation Board November 2010 meeting and reported that the first item on the agenda is an information item. Mr. Donnelly asked if there were any questions about this item. There were none.

2. Funding Status — Informational

(a) 2010-11 Wildlife Restoration Fund Capital Outlay Budget

Budget Act	$1,000,000.00
Previous Board Allocations	-117,000.00
Unallocated Balance	$883,000.00

(b) 2010-11 Habitat Conservation Fund Capital Outlay Budget

Budget Act	$20,668,000.00
Previous Board Allocations	-0.00
Unallocated Balance	$20,668,000.00

(c) 2009-10 Habitat Conservation Fund Capital Outlay Budget

Budget Act	$20,668,000.00
Previous Board Allocations	-333,783.00
Unallocated Balance	$20,334,217.00

(d) 2008-09 Habitat Conservation Fund Capital Outlay Budget

Budget Act	$20,668,000.00
Previous Board Allocations	-2,542,490.00
Unallocated Balance	$18,125,510.00

(e) 2006-07 Habitat Conservation Fund Capital Outlay Budget

Budget Act	$20,699,000.00
Previous Board Allocations	-9,357,844.30
Unallocated Balance	$11,341,155.70

(f) 2006-07 Safe Neighborhood Parks, Clean Water, Clean Air, and Coastal Protection Bond Fund Capital Outlay Budget

Budget Act (2010-11 Reappropriation)	$15,224,000.00
Previous Board Allocations	-12,755,109.00
Unallocated Balance	$2,468,891.00

(g) 1999-00 Safe Neighborhood Parks, Clean Water, Clean Air, and Coastal Protection Bond Fund Capital Outlay Budget

Continuously Appropriated [Sec. 5096.350 (a)(1), (2), (4) & (7)]	$36,100,000.00
Previous Board Allocations	-27,515,085.39
Unallocated Balance	$8,584,914.61

(h) 2004-05 California Clean Water, Clean Air, Safe Neighborhood Parks and Coastal Protection Fund Capital Outlay Budget (2010-11 Reappropriation)

Budget Act (San Joaquin River Conservancy Projects)	$11,000,000.00
Previous Board Allocations	-434,302.00...
Unallocated Balance	$10,565,698.00

(i) Chapter 983, Statutes of 2002, Oak Woodlands Conservation Act

Budget Act (2009-10 Reappropriation)	$4,800,000.00
Previous Board Allocations	-4,586,689.51
Unallocated Balance	$213,310.49

(j) 2001-02 California Clean Water, Clean Air, Safe Neighborhood Parks and Coastal Protection Fund Capital Outlay Budget

Continuously Appropriated (Section 5096.650)	$273,000,000.00
Previous Board Allocations	-185,331,174.82
Unallocated Balance	$87,668,825.18

(k) 2003-04 Water Security, Clean Drinking Water, Coastal and Beach Protection Fund of 2002 Capital Outlay Budget (Section 79568)

Budget Act (2010-11 Reappropriation)	$32,500,000.00
Previous Board Allocations	-21,681,299.35
Unallocated Balance	$10,818,700.65

(l) 2002-03 Water Security, Clean Drinking Water, Coastal and Beach Protection Fund of 2002 Capital Outlay Budget

Continuously Appropriated (Sections 79565 and 79572), including Chapter 81, Statutes of 2005	$814,350,000.00
2003-04 Budget Act Transfer to HCF from Section 79565	-21,000,000.00
2004-05 Budget Act Transfer to HCF from Section 79565	-21,000,000.00
2005-06 Budget Act Transfer to HCF from Section 79565	-4,000,000.00
2005-06 Budget Act Transfer to HCF from Section 79572	-3,100,000.00
2006-07 Budget Act Transfer to HCF from Section 79572	-17,688,000.00
2007-08 Budget Act Transfer to HCF from Section 79572	-5,150,000.00
2008-09 Budget Act Transfer to HCF from Section 79572	-1,000,000.00
Previous Board Allocations	-666,754,469.48
Unallocated Balance	$74,657,530.52

(m) 2010-11 Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Fund of 2006 Capital Outlay Budget

Budget Act (San Joaquin River Conservancy Projects)	$3,380,000.00
Previous Board Allocations	-0.00
Unallocated Balance	$3,380,000.00

(n) 2009-10 Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Fund of 2006 Capital Outlay Budget

Budget Act (San Joaquin River Conservancy Projects)	$10,000,000.00
Previous Board Allocations	-0.00
Unallocated Balance	$10,000,000.00

(o) 2008-09 Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Fund of 2006 Capital Outlay Budget

Budget Act (San Joaquin River Conservancy Projects)	$10,000,000.00
Previous Board Allocations	-0.00
Unallocated Balance	$10,000,000.00

(p) 2007-08 Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Fund of 2006 Capital Outlay Budget (2010-11 Reappropriation)

Budget Act (San Joaquin River Conservancy Projects)	$10,000,000.00
Previous Board Allocations	-75,000.00
Unallocated Balance	$9,925,000.00

(q) 2009-10 Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Fund of 2006 Capital Outlay Budget

Budget Act (NCCP Section 75055(c))	$10,000,000.00
Previous Board Allocations	-0.00
2010-11 Budget Act Reversion	-3,000,000.00
Unallocated Balance	$7,000,000.00

(r) 2009-10 Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Fund of 2006 Capital Outlay Budget

Chapter 2, Statutes of 2009 (SB 8)	$24,000,000.00
Previous Board Allocations	-0.00
Unallocated Balance	$24,000,000.00

(s) 2008-09 Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Fund of 2006 Capital Outlay Budget

Budget Act (NCCP Section 75055(c))	$25,000,000.00
Previous Board Allocations	-1,180,000.00
Unallocated Balance	$23,820,000.00

(t) 2007-08 Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Fund of 2006 Capital Outlay Budget (2010-11 Reappropriation)

Budget Act (NCCP Section 75055(c))	$25,000,000.00
Previous Board Allocations	-13,887,872.00
Unallocated Balance	$11,112,128.00

(u) 2007-08 Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Fund of 2006 Capital Outlay Budget

Budget Act (Section 75055(d)(1)), (2010-11 Reappropriation)	$14,293,000.00
Previous Board Allocations	-8,464,968.00
Unallocated Balance	$5,828,032.00

(v) 2007-08 Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Fund of 2006 Capital Outlay Budget

Budget Act (Section 75055(d)(2)), (2010-11 Reappropriation)	$14,293,000.00
Previous Board Allocations	-5,378,444.00
Unallocated Balance	$8,914,556.00

(w) 2007-08 Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Fund of 2006 Capital Outlay Budget

Budget Act (Section 75055(d)(4)), (2010-11 Reappropriation)	$4,762,000.00
Previous Board Allocations	-1,722,600.00
Unallocated Balance	$3,039,400.00

(x) 2006-07 Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Fund of 2006 Capital Outlay Budget

Continuously Appropriated (Section 75055a)	$164,700,000.00
Previous Board Allocations	-14,490,000.00
Unallocated Balance	$150,210,000.00

Continuously Appropriated (Section 75055(b))	$123,525,000.00
Previous Board Allocations	-50,762,633.50
Unallocated Balance	$72,762,366.50

RECAP OF FUND BALANCES

Wildlife Restoration Fund (a)	$883,000.00
Habitat Conservation Fund (b), (c), (d) and (e)	$70,468,882.70
Safe Neighborhood Parks, Clean Water, Clean Air, and Coastal Protection Bond Fund (f) and (g)	$11,053,805.61
California Clean Water, Clean Air, Safe Neighborhood Parks and Coastal Protection Bond Fund (h), (i) and (j)	$98,447,833.67
Water Security, Clean Drinking Water, Coastal and Beach Protection Fund of 2002 (k) and (l)	$95,567,185.94
Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Fund of 2006 (m), (n), (o), (p), (q), (r), (s), (t), (u), (v), (w) and (x)	$339,991,482.50

RECAP OF NATURAL HERITAGE PRESERVATION TAX CREDIT ACT OF 2000

Chapter 113, Statutes of 2000 and Chapter 715, Statutes of 2004	
Tax credits awarded through June 30, 2008	$48,598,734.00
Chapter 220, Statutes of 2009 (effective January 1, 2010)	
Tax credits awarded	$0.00

3. Special Project Planning Account — Informational

The Board has historically used a special project account to provide working funds for staff evaluation (appraisals, engineering, preliminary title reports, etc.) of proposed projects. Upon the Board's approval of a project, all expenditures incurred and recorded in the Special Project Planning Account are transferred to the Board approved project account which then reduces the Special Project Planning Account expenditures. This procedure provides a revolving account for the pre-project expenses.

Some appropriations now made to the Board do not include a specific budgeted planning line item appropriation necessary to begin a project without prior Board authorization. Pre-project costs are a necessary expenditure in most all capital outlay projects. The Special Project Planning Account is available to be used for these costs.

The Board, at its May 6, 1986 meeting, authorized the Executive Director to use up to 1% of a budgeted appropriation to set up and maintain an appropriate planning account with the provision it would be reported to the Board as an informational item.

Accordingly, a planning account has been set up as follows:

Safe Neighborhood Parks, Clean Water, Clean Air
and Coastal Protection Fund.....$35,000.00

Habitat Conservation Fund.....$35,000.00

Mr. Donnelly provided a brief description on how a project planning account works. Mr. Donnelly explained that at the end of each agenda item, in addition to the allocation of a grant or the acquisition cost, there is an additional request for project expenses, and once the funding is approved by the Board, those funds, authorized by the Board for project-related expenses, are put back into the planning account. Mr. Donnelly commented that we try to keep the planning account whole as much as we can, but sometimes projects incur cost and are not completed and it is necessary to use planning account. Mr. Donnelly asked if there were any questions about this item. Ms. Finn asked if the most you can get from planning account at any time is $70,000.00. Mr. Donnelly responded that it is up to one percent of the fund itself.

4. Proposed Consent Calendar (Items 4—17)

Mr. Donnelly reported that several letters of support were received for the following projects presented in Consent Calendar:

- **Item #*11** (Eticuera Creek Watershed Habitat Restoration, Napa County) Letters of support received from: Noreen Evans, Assembly Member, District 7; Patricia Wiggins, Senator, Second Senate District; Rich Burns, Field Manager, Ukiah, United State Department of the Interior, Bureau of Land Management, Ukiah Field Office; Phillip Blake, District Conservationist, United States Department of Agriculture; Morgan Doran, Livestock and Natural Resources Advisor for Napa, Solano and Yolo Counties, University of CA, Agricultural and Natural Resources; Karl Burke, Closure Manager –McLaughlin Mine, Homestake Mining Company.
- **Item #*13** (Insectaries for Pollinators and Farm Biodiversity, Sonoma County). Letters of support received from: Charlette Epifanio, District Conservationist, Natural Resources Conservation Services; Kathy Kellison, Executive Director, Partners for Sustainable Pollination; Ron Rolleri, Secretary, North Coast Resource Conservation & Development Council.

*5. Approval of Minutes — August 26, 2010

As one of the consent items heard at the beginning of the meeting, it was moved by Mr. McCamman that the Wildlife Conservation Board approve the minutes of the August 26, 2010 meeting.

Motion carried.

*6. Recovery of Funds

The following projects previously authorized by the Board are now completed, and some have balances of funds that can be recovered and returned to their respective funds. It is recommended that the following totals be recovered and that the projects be closed.

$8,881.83	to the	**Habitat Conservation Fund**
$0.00	to the	**Wildlife Restoration Fund**
$1,191,838.99	to the	**California Clean Water, Clean Air, Safe Neighborhood Parks, and Coastal Protection Fund**
$43,795.21	to the	**Water Security, Clean Drinking Water, Coastal and Beach Protection Fund of 2002**
$735.00	to the	**Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Fund of 2006**

HABITAT CONSERVATION FUND

Montna Farms Wetland Restoration, Sutter County

Allocated	$150,000.00
Expended	-149,635.17
Balance for Recovery	$364.83

Truckee River Wildlife Area, Gray Creek Canyon Unit, Nevada County

Allocated	$15,000.00
Expended	-6,483.00
Balance for Recovery	$8,517.00

Total Habitat Conservation Fund **$8,881.83**

WILDLIFE RESTORATION FUND

Kings River Fishing Access, Fresno County

Allocated	$11,824.00
Expended	-11,824.00
Balance for Recovery	$0.00

Total Wildlife Restoration Fund **$0.00**

CALIFORNIA CLEAN WATER, CLEAN AIR, SAFE NEIGHBORHOOD PARKS, AND COASTAL PROTECTION FUND

California Fisheries Restoration Projects - 2007, Chorro Creek Floodplain and Riparian Restoration, San Luis Obispo County

Allocated	$1,157,073.00
Expended	-158.50
Balance for Recovery	$1,153,231.50

Eastern Mojave Desert Springs Habitat Restoration, San Bernardino County

Allocated	$43,000.00
Expended	-4,075.01
Balance for Recovery	$38,924.99

Kings River Fishing Access, Fresno County

Allocated	$112,176.00
Expended	-112,176.00
Balance for Recovery	$0.00

Pacifica Fishing Pier Improvements, San Mateo County

Allocated	$500,252.00
Expended	-500,252.00
Balance for Recovery	$0.00

Total California Clean Water, Clean Air, Safe Neighborhood Parks, and Coastal Protection Fund **$1,191,838.99**

WATER SECURITY, CLEAN DRINKING WATER, COASTAL AND BEACH PROTECTION FUND OF 2002

Loch Lomond Marina Intertidal Enhancement, Marin County

Allocated	$207,775.00
Expended	-163,979.79
Balance for Recovery	$43,795.21

Total Water Security, Clean Drinking Water, Coastal and Beach Protection Fund of 2002 **$43,795.21**

SAFE DRINKING WATER, WATER QUALITY AND SUPPLY, FLOOD CONTROL, RIVER AND COASTAL PROTECTION FUND OF 2006

Iron Mountain Wildlife Area, Expansion 4, San Diego County

Allocated	$15,000.00
Expended	-14,265.00
Balance for Recovery	$735.00

Total Safe Drinking Water, Water Quality and **$735.00**

Supply, Flood Control, River and Coastal Protection Fund of 2006

As one of the consent items heard at the beginning of the meeting, it was moved by Mr. McCamman that the Wildlife Conservation Board approve the Recovery of Funds for the projects listed on pages 7 through 9 of the agenda and close the project accounts. Recovery totals include $8,881.83 to the Habitat Conservation Fund; $0.00 to the Wildlife Restoration Fund; $1,191,838.99 to the California Clean Water, Clean Air, Safe Neighborhood Parks, and Coastal Protection Fund; $43,795.21 to the Water Security, Clean Drinking Water, Coastal and Beach Protection Fund of 2002; and $735.00 to the Safe Neighborhood Parks, Clean Water, Clean Air, and Coastal Protection Bond Fund.

Motion carried.

*7. Fund Shift, Various Projects $887,855.00
Fresno, Madera and Monterey Counties

Mr. Donnelly pointed out that there is a wording modification in item #7 (Fund Shift, Various Projects; Fresno, Madera and Monterey Counties), and he'll be happy to pull this project for a discussion, if necessary. Mr. Donnelly reported that on page 11 of this agenda the first sentence on the top of the page says "The no cost time extensions are due, in part, to the Pooled Money Investment Account (PMIA) bond freeze." Mr. Donnelly commented that the account actually did not freeze the bonds, so Mr. Donnelly recommended that "Pooled Money Investment Account (PMIA)" should be taken out and further in that sentence remove the words "which recently lifted", and that sentence would read "The no cost time extensions are due, in part, to the bond freeze of December 2008." Then, in the next sentence, Mr. Donnelly recommended to take out the words "of the PMIA freeze", and that sentence would read "As a result, the Grantee's work was either slowed or stopped by the Grantor until funding for the project allocations could be secured from up front bond sale proceeds." Mr. McCamman asked if there is no material difference with these corrections. Mr. Donnelly confirmed that this is correct.

This proposal was to consider various fund shifts for six previously approved San Joaquin River (SJR) Conservancy and Wildlife Conservation Board (WCB) projects. The cooperative projects involve the SJR Conservancy, Department of Fish and Game, City of Fresno, County of Madera, and Ducks Unlimited, Inc. The proposed fund shifts are necessary to meet existing Grant Agreement obligations and will utilize funding authorized for the same purpose from a subsequent enactment year appropriation.

The table below outlines the fund shifts for the previously approved cooperative projects which include five projects for the SJR Conservancy from the California

Clean Water, Clean Air, Safe Neighborhood Parks, and Coastal Protection Fund (Proposition 40) and one project for the WCB from the Wildlife Restoration Fund (WRF).

Grant Agreement	Grantee	WCB Approval Date*	Project Name	County	Fund Shift Amount (Maximum)
WC-2043TC	City of Fresno	11/17/05	SJR Parkway, Lewis S. Eaton Trail, Friant Road Segment	Fresno	$140,000.00
WC-6084TC	County of Fresno	05/24/07	SJR Parkway, Lost Lake Regional Park Master Plan	Fresno	$223,445.00
WC-7019TC	SJR Conservancy	08/23/07	SJR Parkway, Lewis S. Eaton Trail River West CEQA	Fresno	$125,600.00
WC-7056BT	Department of Fish and Game	02/20/08	SJ Hatchery Public Access, Phase I, Preconstruction Planning & Design	Fresno	$187,500.00
WC-8004BT	County of Madera	05/22/08	SJR Parkway, River West-Madera Restoration Planning & Environmental Review	Madera	$37,100.00
WC-9022AL	Ducks Unlimited, Inc.	05/27/10	Moss Landing Wildlife Area Public Access	Monterey	$174,210.00
Total (Maximum Amount)					**$887,855.00**

* The project descriptions for the previously approved items may be viewed at www.wcb.ca.gov in the WCB Meeting Minutes for the respective Board meeting.

The fund shifts for the SJR Conservancy projects are necessary as the Grant Agreements require no cost time extensions in order for the Grantee's to fulfill existing obligations. The no cost time extensions are due, in part, to the bond freeze of December 2008 which recently lifted. As a result, the Grantee's work was either slowed or stopped by the Grantor until funding for the project allocations could be secured from up front bond sale proceeds. The current allocations for these Grantee obligations are due to revert at the end of the fiscal year.

With regard to the Moss Landing Wildlife Area Public Access project, the fund shift is necessary due to an accounting error wherein a previous approved WCB project allocation was paid from a later year appropriation from the same fund source for the same purpose. The error was discovered during reconciliation and within one week of release of the monthly Agency Reconciliation Report. A Correction Memorandum was immediately sent to the State Controllers Office (SCO); however, the SCO was unable to revive the reverted appropriation. This unfortunate situation has left a cash shortage in the appropriation from which the Moss Landing Wildlife Area Public Access project was funded requiring the WCB

to fund shift a part of this Grantee obligation to the current fiscal year WRF appropriation established for the same purpose.

The table outlines the maximum amount proposed for the fund shift. The amount of the shift will be based on the unliquidated agreement balance at the time of the fund shift. A revised Funding Certification will be prepared for each Grant Agreement and submitted to the SCO. The fund shifts will utilize funding authorized for the same purpose from a subsequent fiscal year appropriation. The shifted amounts from the previous WCB allocations will be recovered and returned to their respective fund sources; therefore, the net effect of the project fund shift on the WCB allocation for the project is zero.

Staff recommended that the Wildlife Conservation Board approve the fund shifts as proposed; allocate up to $713,645.00 from the California Clean Water, Clean Air, Safe Neighborhood Parks, and Coastal Protection Fund (Proposition 40), Section 5096.650(b)(5); allocate up to $174,210.00 from the Wildlife Restoration Fund; and authorize staff and the Department of Fish and Game to proceed substantially as planned.

As one of the consent items heard at the beginning of the meeting, it was moved by Mr. McCamman that the Wildlife Conservation Board approve the fund shifts as proposed; allocate up to $713,645.00 from the California Clean Water, Clean Air, Safe Neighborhood Parks, and Coastal Protection Fund (Proposition 40), Section 5096.650(b)(5); allocate up to $174,210.00 from the Wildlife Restoration Fund; and authorize staff and the Department of Fish and Game to proceed substantially as planned.

Motion carried.

*8. Hamilton City Flood Damage Reduction and Ecosystem Restoration
Glenn County — $10,000.00

This proposal was to consider the disposal of 120± acres of a larger 482± acre property located in the Sacramento River Conservation Area, Expansion 4 (Expansion 4), and to authorize the reuse of the proceeds to acquire 104± acres in fee title for the protection of riparian and riverine habitat supporting threatened and endangered species. The property was acquired with a Wildlife Conservation Board (WCB) grant to The Nature Conservancy (TNC), which was approved by WCB in November 2001.

LOCATION
The disposal property and proposed acquisition property (Stiles Ranch) are located approximately 10 miles west of Chico and southeast of the Hamilton City, on the west side of the Sacramento River in Glenn County. Both properties are improved with orchards and are located outside the immediate

levee system of the Sacramento River. Various governmental agencies and nonprofits own property within the vicinity, including TNC, Department of Fish and Game (DFG), California Department of Parks and Recreation (DPR) and the U.S. Fish and Wildlife Service (USFWS).

The DFG's Sacramento River Wildlife Area (SRWA) is located further east of Expansion 4, along the Sacramento River. SRWA is 1,078± acres in size and was acquired in a number of separate transactions between the late eighties and early nineties. USFWS holdings in the area include the Sacramento River National Wildlife Refuge (SRNWR), located immediately north of Stiles Ranch property. Immediately east of the Stiles Ranch property is the Bidwell - Sacramento River State Park.

The Expansion 4 property lies on the protected side of the J levee, outside the main floodplain of the Sacramento River. When Expansion 4 was presented to the Board in 2000 for funding, it was anticipated the new setback levee would run through the middle of the Expansion 4, from north to south. The portion of the Expansion 4 located on the river side of the levee would be restored to riparian habitat and the portion outside the levee would be excess and considered for disposal.

PROJECT DESCRIPTION

Since the early 2000s, the WCB has approved six grants for acquisitions and expansions at its meetings under the title of the Sacramento River Conservation Area (SCRA). The WCB's grant to acquire Expansion 4 was one of these. The SCRA acquisitions provide protection of riparian habitat for threatened and endangered species and public access, as well as assistance in the implementation of the Hamilton City Flood Damage and Ecosystem Restoration project (Flood and Ecosystem Project).

The two main objectives of the Flood and Ecosystem Project are to expand the floodplain to create a more natural hydrology, increasing riverine and riparian habitat and provide an improved level of flood protection for Hamilton City. The riparian areas will provide an important seasonal habitat for migratory birds, waterfowl, native amphibians and salmonids. This includes a number of federal and State listed threatened and endangered species, such as the western yellow-billed cuckoo, giant garter snake, greater sandhill crane, bank swallow, western pond turtle and Swainson's hawk. Improved riverine habitat will provide improved spawning areas for the central valley steelhead and winter-run Chinook salmon. With regard to Expansion 4, the Flood and Ecosystem Project essentially called for the removal of a private levee, referred to as the J levee, and construction of a new (setback) levee further away from the river.

At this time, the current configuration of the Setback Levee Project has been established so that excess portion of Expansion 4 can be determined. Part of this proposal is for TNC to dispose of the excess 120± acres of Expansion 4

and reuse the proceeds from this disposal to assist in the acquisition of additional property along the Sacramento River. The acquisition will further implement the Flood and Ecosystem Project. The Stiles Ranch property is located within the boundary area of the Flood and Ecosystem Project and will allow for the construction of the new setback levee and the further restoration of riparian habitat within the newly expanded floodplain area of the Sacramento River.

WCB PROGRAM

The proposed acquisition of this project is being made under the Land Acquisition Program at WCB. The Acquisition Program is administered pursuant to the WCB's original enabling legislation, the Wildlife Conservation Law of 1947 (Fish and Game Code Section 1300 et seq.) to acquire areas that can successfully sustain wildlife and provide for suitable recreation opportunities. Under this program, acquisition activities are carried out in conjunction with the DFG, which will evaluate the biological values of property. In this particular case the DFG, as a member of the Sacramento River Conservation Area Forum (SRCAF), authorized acquisition of properties lying within the boundary of the purview of the SRCAF.

The SRCAF was established from Senate Bill 1086, passed by the State Legislature in 1986, calling for development of a management plan to protect, restore and enhance fisheries and riparian habitat along the Sacramento River and its tributaries along the 222 miles of the Sacramento River between Keswick and Verona. The SRCAF is governed by a board of directors that includes both private landowners and public interest appointees from each of the seven involved counties and an appointee of the Natural Resources Agency. The SRCAF is advised by a panel of representatives from three State agencies: the Department of Water Resources, DFG and the Reclamation Board; and three federal agencies: the Army Corps of Engineers, the USFWS and the Bureau of Reclamation. Both proposed projects have been presented to the SRCAF Board as informational items.

MANAGEMENT OBJECTIVES AND NEEDS

TNC and its partners, including the USFWS, the DFG, the WCB, and stakeholders participating in the SRCAF, have undertaken the largest riparian restoration project in the United States. The goal is to restore a continuous 100-mile stretch of ecologically viable riparian habitat to flood-prone lands along the river between Red Bluff and Colusa. On some sites the river will revegetate its banks and meander through the natural process of winter flooding and deposition. On other sites, TNC is contracting with local farmers to plant native trees and shrubs, pumping money into the local economy and helping to generate interest and involvement in local communities in the fate of the river ecosystem.

TNC, the USFWS, the DFG, and the WCB have acquired 14,000 acres along the river. Three thousand acres have been restored thus far to native riparian forest.

TNC intends to manage the properties in the immediate future, with the possibility of combining Expansion 4 with the adjacent SRWA, Pine Creek Unit. The Stiles Ranch property could potentially be added to the SRNWR.

TERMS

The grant for Expansion 4 provides that the Grantee, TNC, may dispose or transfer ownership of all or a portion of the property with the approval of the WCB Executive Director. The Executive Director has authorized the disposal of the excess portions of Expansion 4. Those proceeds are to be held in an escrow account. If approved by the Board, the funds will be used to help acquire the 104± acre Stiles Ranch property. The newly acquired Stiles Ranch property will also fall under the terms of the grant agreement and a Notice of Unrecorded Grant referring back to the original agreement will be recorded on the property. If the Board does not approve, then the funds will be returned to the WCB. The remaining portions of Expansion 4 will remain encumbered by the grant terms of the original agreement.

It is understood both the value of the disposed portion of Expansion 4 and the purchase price of the Stiles Ranch property will be based on the fair market value appraisals, approved by the Department of General Services (DGS) on August 26, 2010 (Expansion 4,Vereschagin property), and September 13, 2010 (Stiles Ranch property).

The terms and conditions of the existing grant still require staff of the WCB to review and approve all title documents, appraisals, preliminary title reports, documents for purchase and sale, escrow instructions and instruments of conveyance prior to disbursement of funds directly into the escrow account established for the acquisition and disposal of the two subject properties. In the event of breach of the grant terms, the WCB can encumber the properties with a conservation easement and seek reimbursement of funds.

PROJECT FUNDING

The proposed funding breakdown for the project is as follows:

Disposal of Expansion 4 (dry side)	$672,581.00
Purchase Stile Ranch Property	- 934,257.00
TNC contribution (via DWR grant)	261,676.00
TOTAL	$0.00
Other Project-related Costs:	$10,000.00
TOTAL WCB Allocation	**$10,000.00**

It is estimated that an additional $10,000.00 will be needed to cover project-related expenses, including DGS review costs.

FUNDING SOURCE
The proposed funding source for this project is the Habitat Conservation Fund (Proposition 117), Section 2786 (b/c)(1E) that provides funding for protection of threatened and endangered species within floodplains and is consistent with the objectives of this project. The original funding source used for Expansion 4 was the Habitat Conservation Fund (Proposition 117), Section 2786 (b/c) that provides funding for protection of threatened and endangered species and is consistent with the objectives of this project.

ENVIRONMENTAL COMPLIANCE AND STATE RECOMMENDATION
The acquisition has been reviewed for compliance with the California Environmental Quality Act (CEQA) requirements and is proposed as exempt under CEQA Guidelines Section 15313, Class 13, as an acquisition of land for wildlife conservation purposes, and Section 15325, Class 25, as a transfer of an ownership interest in land to preserve open space. Subject to authorization by the WCB, a Notice of Exemption will be filed with the State Clearinghouse. The Department of Fish and Game has reviewed this proposal and recommends it for approval

STAFF RECOMMENDATION
Staff recommended that the Wildlife Conservation Board approve this project as proposed; allocate $10,000.00 from Habitat Conservation Fund (Proposition 117), Section 2786 (b/c)(1E) for internal project-related expenses; authorize staff to enter into appropriate agreements necessary to accomplish this project; and authorize staff and the Department of Fish and Game to proceed substantially as planned.

As one of the consent items heard at the beginning of the meeting, it was moved by Mr. McCamman that the Wildlife Conservation Board approve this project as proposed; allocate $10,000.00 from Habitat Conservation Fund (Proposition 117), Section 2786 (b/c)(1E) for internal project-related expenses; authorize staff to enter into appropriate agreements necessary to accomplish this project; and authorize staff and the Department of Fish and Game to proceed substantially as planned.

Motion carried.

*9. Loch Lomond Vernal Pool $25,000.00
Ecological Reserve Exchange
Lake County

This proposal was to consider the acceptance of 1.7± acres and the disposal of 1.4± acres through an exchange of fee title land between the Department of Fish and Game (DFG) and a private landowner to expand protection of vernal pool habitat at the Loch Lomond Ecological Reserve (Reserve). The proposed exchange will complete the DFG's acquisition of the complete vernal pool while disposing of property not related to the protection of critical habitat. The exchange will ensure that the total vernal pool is protected from unauthorized use but will be available for visits by schoolchildren and researchers.

LOCATION
The subject property is located adjacent to the community of Loch Lomond, along the north side of State Highway 175 corridor, within the Big Canyon/ Putah Creek Watershed, in Central Lake County. The area consists of vernal pool habitat, healthy, large conifers, black oak, and an understory of manzanita, mountain-mahagony and ceanothus. Most of the surrounding development is rural residential with some small commercial development in the vicinity.

PROJECT DESCRIPTION
The proposed exchange will complete the DFG's acquisition and protection of the intended vernal pool habitat within the Reserve. The Reserve was created by three prior acquisitions, totaling approximately 13 acres. The exchange will increase the area to 14± acres and complete the last piece necessary to provide full protection of vernal pool complex. Currently there are plans to construct a perimeter fence around the entire project area once the exchange is completed. The disposal area was acquired under one of the prior acquisitions, and has been reviewed by DFG and determined not to contain any significant habitat values.

A survey of the subject property was completed by licensed staff from the California Department of Forestry and Fire Protection (CalFire). The survey was given to the real estate appraiser and will be used to record a new parcel map for the area if the project is approved. The subject property contains a Northern Ash Flow Vernal Pool and is one of two protected in the Napa-Lake County region. It contains rare, endemic vernal pool plants, including button-celery, many flowered navarretia, few-flowered navarretia, and Konocti manzanita. Acquisition of the property will also increase the public's educational opportunities, with educational field trips and access provided under the direction of DFG staff.

WCB PROGRAM
The proposed exchange is being made under the Land Acquisition Program at WCB. The Acquisition Program is administered pursuant to the WCB's original

enabling legislation, the Wildlife Conservation Law of 1947 (Fish and Game Code Section 1300 et seq.), which gives the WCB the authority to acquire areas that can successfully sustain wildlife and provide for suitable recreation opportunities. Under this program, acquisition activities are carried out in conjunction with the DFG, which evaluates the biological values of property and whether or not to recommend it for funding.

MANAGEMENT OBJECTIVES

The maintenance, conservation, security and caretaker services on the property will be managed by the DFG's North Central Region staff. The DFG already has the fencing materials needed to enclose the property, and installation will be handled by the DFG's staff. Any additional costs associated with this project will be nominal and absorbed under the current operation and maintenance budget for the Reserve.

TERMS

The property owner has agreed to trade the property for a portion of the existing ecological reserve. Both properties were appraised for $67,000.00 by a local independent appraiser, and the appraisals were reviewed and approved by the Department of General Services (DGS). The terms and conditions of the proposed exchange agreement provide that staff of the WCB will review and approve all title documents, appraisals, preliminary title reports, exchange documents, escrow instructions and instruments of conveyance prior to recordation of the deeds transferring title to the properties.

PROJECT FUNDING

This project is an even exchange. There are no capital costs for this project.

Other project-related costs:	$25,000.00
TOTAL WCB Allocation	**$25,000.00**

It is estimated that $25,000.00 will be needed for internal project-related expenses, including title insurance, fifty percent of the escrow fees, appraisal review costs by the DGS and the survey costs incurred by the CalFire.

FUNDING SOURCE

The proposed funding source for this project is the Habitat Conservation Fund (Proposition 117), Section 2786(b/c)(1E), that allows for the protection of habitat for threatened and endangered species and preservation of wildlife values within a floodplain or flood corridors and is consistent with this project.

ENVIRONMENTAL COMPLIANCE AND STATE RECOMMENDATION

The project has been reviewed for compliance with the California Environmental Quality Act (CEQA) requirements and is proposed as exempt under CEQA Guidelines Section 15313, Class 13, as an acquisition of land for

fish and wildlife conservation purposes, and under Section 15325, Class 25, as a transfer of an ownership interest in land to preserve open space and habitat. Subject to approval by the WCB, a Notice of Exception will be filed with the State Clearinghouse.

STAFF RECOMMENDATION
Staff recommended that the Wildlife Conservation Board approve this project as proposed; allocate $25,000.00 from the Habitat Conservation Fund (Proposition 117), Section 2786(b/c)(1E), for internal project-related expenses; authorize staff to enter into appropriate agreements necessary to accomplish this project; and authorize staff and the Department of Fish and Game to proceed substantially as planned.

As one of the consent items heard at the beginning of the meeting, it was moved by Mr. McCamman that the Wildlife Conservation Board approve this project as proposed; allocate $25,000.00 from the Habitat Conservation Fund (Proposition 117), Section 2786(b/c)(1E), for internal project-related expenses; authorize staff to enter into appropriate agreements necessary to accomplish this project; and authorize staff and the Department of Fish and Game to proceed substantially as planned.

Motion carried.

*10. Swiss Ranch, Expansion 3 $430,000.00
Calaveras County

This proposal was to consider the acquisition by the Department of Fish and Game (DFG) of a conservation easement over 304± acres to maintain and protect unfragmented habitat in Calaveras County for the migratory Rail Road Flat deer herd, protection of oak woodland, hardwood-conifer, mixed chaparral, and riparian habitats for black bear, mountain lion, and bobcat, and contribute to linkages and corridors between upper and lower Sierra habitat. The DFG will hold and monitor the conservation easement.

LOCATION
This privately owned property is located in central Calaveras County, along Swiss Ranch Road approximately 18± miles northeast of San Andreas, between the communities of Mountain House and Rail Road Flat. The property is within the approved Railroad Flat Deer Winter Range Conceptual Area Protection Plan (CAPP). The Board allocated funding in 1985, 1988 and 1998 for the purpose of acquiring conservation easements on lands immediately south and west of the subject property. Last year, the property owner donated a conservation easement to Calaveras County over a separate 197± acres immediately east of this property thereby completing a linkage between Eagle Ridge to the immediate west with federal forest and Bureau of Land Management (BLM) land to the immediate east. The BLM land extends to

federal forest land to its east and south with DFG managed Sheep Ranch Wildlife Area. In close proximity, but non-contiguous, are the Calaveras Big Trees State Park and more federal forest land to the east and southeast.

PROJECT DESCRIPTION

This conservation easement will preserve and protect in perpetuity migratory deer habitat, oak woodland, hardwood-conifer, mixed chaparral, and riparian habitats for black bear, mountain lion, and bobcat. The conservation easement will provide habitat corridors and connectivity between adjacent lands that have been preserved for conservation purposes. The key species benefiting from this proposed conservation easement are migrant California mule deer, with the entire property providing winter habitat forage for large numbers of migrant deer. The ranch also supports a variety of other wildlife, including black bear, mountain lion, bobcat, coyote, and California quail. Other species that will benefit from the acquisition include ringtail cats and golden eagles.

According to the DFG's Railroad Flat deer herd management plan, 75 percent of the winter range of this herd is privately owned. Land uses in the area are gradually changing from large acreage cattle ranches to small acreage ranchettes, potentially reducing the property's wildlife values, making public protection critical to protection of this herd.

WCB PROGRAM

The proposed acquisition of this project is being made under the Land Acquisition Program at WCB. The Acquisition Program is administered pursuant to the WCB's original enabling legislation, the Wildlife Conservation Law of 1947 (Fish and Game Code Section 1300 et seq.) to acquire areas that can successfully sustain wildlife and provide for suitable recreation opportunities. Under this program, acquisition activities are carried out in conjunction with the DFG evaluating the biological values of property through development of a Conceptual Area Protection Plan (CAPP). The CAPP is then submitted to DFG's Regional Operations Committee (ROC) for review and approval and later transmitted to the WCB with a recommendation to fund.

MANAGEMENT OBJECTIVES AND NEEDS

This project provides the DFG with an opportunity to protect critical habitat, benefiting a host of wildlife species, while incurring very little management costs. It is estimated that 1-2 person days per year would be needed to conduct an onsite inspection to monitor the conservation easement area. DFG will hold title to the easement and will monitor the property on an annual basis to ensure that conservation easement conditions are being met. Monitoring costs will be covered and absorbed under the current regional operation and maintenance (O&M) budget.

TERMS

The property owner has agreed to sell the conservation easement to the DFG for the Department of General Services (DGS) approved appraised fair market value of $410,000.00. The terms and conditions of the proposed property acquisition agreement provide that staff of the WCB will review and approve all title documents, appraisals, preliminary title reports, documents for purchase and sale, escrow instructions and instruments of conveyance prior to disbursement of funds directly into the escrow account established for the acquisition. Additionally, DFG staff will be responsible for monitoring the property at least once annually.

PROJECT FUNDING

The WCB will fund the entire purchase price of the easement which is $410,000.00.

Wildlife Conservation Board	**$410,000.00**
Other Project-related Costs	20,000.00
TOTAL WCB Allocation	**$430,000.00**

It is estimated that an additional $20,000.00 will be needed to cover project-related expenses, including appraisal costs, DGS review costs, and escrow fees bringing the total recommended allocation for this proposal to $430,000.00.

FUNDING SOURCE

The proposed funding source for this project is the Habitat Conservation Fund (Proposition 117), Section 2786 (a) that provides funding for protection of deer, mountain lion, and oak habitats and is consistent with the objectives of this project.

ENVIRONMENTAL COMPLIANCE AND STATE RECOMMENDATION

The acquisition has been reviewed for compliance with the California Environmental Quality Act (CEQA) requirements and is proposed as exempt under CEQA Guidelines Section 15313, Class 13, as an acquisition of land for wildlife conservation purposes, and Section 15325, Class 25, as a transfer of an ownership interest in land to preserve open space. Subject to authorization by the WCB, a Notice of Exemption will be filed with the State Clearinghouse. The DFG has reviewed this proposal and recommends it for approval.

STAFF RECOMMENDATION

Staff recommended that the Wildlife Conservation Board approve this project as proposed; allocate $430,000.00 from the Habitat Conservation Fund (Proposition 117), Section 2786(a), to cover the acquisition and internal project-related expenses; authorize staff to enter into appropriate agreements

necessary to accomplish this project; and authorize staff and the Department of Fish and Game to proceed substantially as planned.

As one of the consent items heard at the beginning of the meeting, it was moved by Mr. McCamman that the Wildlife Conservation Board approve this project as proposed; allocate $430,000.00 from the Habitat Conservation Fund (Proposition 117), Section 2786(a), to cover the acquisition and internal project-related expenses; authorize staff to enter into appropriate agreements necessary to accomplish this project; and authorize staff and the Department of Fish and Game to proceed substantially as planned.

Motion carried.

*11. Eticuera Creek Watershed Habitat Restoration $515,000.00
Napa County

This proposal was to consider the allocation for a grant to the Land Trust of Napa County for a partnership project with the State Coastal Conservancy, the U.C. McLaughlin Reserve, the Blue Ridge Berryessa Natural Area Conservation Partnership, and the Department of Fish and Game (DFG) to restore riparian habitat in the Eticuera Creek Watershed.

LOCATION
The project is located in the Eticuera Creek Watershed between the town of Knoxville and the north shore of Lake Berryessa in Napa County. The project is located on three separate ownerships: property owned by the Homestead Mining Company (HMC), but managed through long-term agreement by the University of California McLaughlin Reserve (McLaughlin), a second portion that is privately owned, and the remainder of the project is on the Knoxville Wildlife Area, owned by the Department of Fish and Game (DFG).

PROJECT DESCRIPTION
The Eticuera Creek Watershed has for millenia supported riparian habitat, one of the most important habitats for wildlife in California. Statewide, most of this habitat type has been impacted by human activities through development, agriculture, and flood control. This particular watershed has been altered primarily by mining and the introduction exotic invasive plant species. Exotic invasive plant species like tamarisk, one of the main targets of this project, out-compete native plants and provide little wildlife habitat value. In some areas of the State, tamarisk has formed a complete monoculture in riparian corridors, excluding all native vegetation.

This project is a watershed-wide endeavor addressing multiple issues with multiple partners in a four pronged approach:

1. Knoxville Creek at the Knoxville town-site has been heavily impacted by both gold and mercury mining. While no longer present, a mining town was once located on the banks of Knoxville Creek and, as a consequence, nearly all riparian vegetation was removed. Later, mine tailings were disposed of along the creek banks. HMC, the current owner of the area, is in the process of moving these mine tailings away from the Knoxville Creek channel to protect water quality in the creek. While HMC owns the property, it is managed through long-term agreement by McLaughlin, and HMC is not required to replant with native plants or control invasive species. WCB funding will allow for the enhancement of the aquatic and habitat benefits of the project by eliminating exotic invasive species on the site and planting both woody and herbaceous native riparian species on 21.6 acres of floodplain created by the removal of the tailings. Additional riparian vegetation will be installed along 3500 lineal feet of creek channel. The floodplain plants will be irrigated for three years after planting and all plants will be monitored and replanted as necessary to achieve 80% survivorship.

2. Portions of Knoxville Creek at the Knoxville town site have become heavily incised and disconnected from the floodplain as a result of human activity along the creek. A hydrologic study will be implemented to identify solutions to restore more natural creek morphology and function, which will be implemented in future projects.

3. In 2002 and 2006, the Board funded a two-phase project to remove tamarisk from Knoxville and Eticuera Creeks on the Knoxville Wildlife Area. This project will continue that work on other creeks and properties in the watershed. These will include Eticuera Creek, Adams Creek and Nevada Creek on the Gamble Ranch and Long Canyon Creek, Zim Zim Creek and Nevada Creek on the Knoxville Wildlife Area. In addition, Eticuera Creek on the newly acquired Todd Ranch portion of the wildlife area will also be treated.

4. Barbed goatgrass, an exotic invasive grass, has begun to invade the Eticuera Creek watershed. This species is of particular concern because it can invade serpentine seeps, a rare wetland type with endemic plants that would be highly susceptible to such an invasion. This has already occurred in nearby watersheds. This portion of the project will control the invasion in its early stages, before it is irreversible. Preliminary surveys and mapping have been done in anticipation of herbicide treatments to be funded by this grant.

WCB PROGRAM

This project is funded through the California Riparian Habitat Conservation Program and meets program's goal of increasing riparian habitat across California by implementing riparian habitat restoration projects.

MANAGEMENT OBJECTIVES AND NEEDS

According to the Grant Agreement, signed by both the Grantee and Landowners, the five-year implementation period is to be followed by long-term management of the project by the Grantee for riparian habitat values for at least 25 years. Furthermore, all areas where tamarisk, barbed goatgrass and other invasives were removed by this project will be monitored for reinvasion and retreated when necessary.

This project will meet the objectives of the Knoxville Wildlife Area Management Plan, The U.C. McLaughlin Reserve Management Plan and the Blue Ridge Berryessa Natural Area Conservation Framework.

PROJECT FUNDING

The proposed funding breakdown for the project is as follows:

Wildlife Conservation Board	**$515,000.00**
State Coastal Conservancy	118,113.00
Homestake Mining Company	100,000.00
Other Partners	92,500.00
TOTAL	**$825,613.00**

Project costs will be for project management; hydrologic assessment and mapping; planning and design; site preparation; weed control; planting; irrigation and plant protection; maintenance; monitoring/evaluation; replanting; and project administration.

FUNDING SOURCE

The proposed funding sources for this project are the Habitat Conservation Fund (Proposition 117), Section 2786 (e/f)(1E) and the California Clean Water, Clean Air, Safe Neighborhood Parks and Coastal Protection Fund (Proposition 40), Section 5096.650. Respectively, these sources provide funding for the protection, restoration or enhancement of riparian habitat located in floodplains and for habitat that provides corridors linking separate habitat areas to prevent habitat fragmentation. They are consistent with the objectives of this project.

ENVIRONMENTAL COMPLIANCE AND STATE RECOMMENDATION

The DFG has reviewed this proposal and recommends it for funding by the WCB. The DFG, as lead agency, has prepared and filed a Mitigated Negative Declaration for the project and staff has prepared written findings based upon the Mitigated Negative Declaration. Subject to approval by the WCB, a Notice of Determination will be filed with the State Clearinghouse.

STAFF RECOMMENDATION

Staff recommended that the Wildlife Conservation Board adopt the written findings and approve this project as proposed; allocate $370,000.00 from the Habitat Conservation Fund (Proposition 117), Section 2786 (e/f)(1E) and

$145,000.00 from the California Clean Water, Clean Air, Safe Neighborhood Parks and Coastal Protection Fund (Proposition 40), Section 5096.650; authorize staff to enter into appropriate agreements necessary to accomplish this project; and authorize staff and the Department of Fish and Game to proceed substantially as planned.

As one of the consent items heard at the beginning of the meeting, it was moved by Mr. McCamman that the Wildlife Conservation Board adopt the written findings and approve this project as proposed; allocate $370,000.00 from the Habitat Conservation Fund (Proposition 117), Section 2786 (e/f)(1E) and $145,000.00 from the California Clean Water, Clean Air, Safe Neighborhood Parks and Coastal Protection Fund (Proposition 40), Section 5096.650; authorize staff to enter into appropriate agreements necessary to accomplish this project; and authorize staff and the Department of Fish and Game to proceed substantially as planned.

Motion carried.

*12. Napa-Sonoma Marshes Wildlife Area, $10,000.00
American Canyon
Napa County

This proposal was to consider the acceptance of 352± acres of land for the Department of Fish and Game (DFG) for protection of bay wetlands, as an addition to the DFG's Napa-Sonoma Marshes Wildlife Area. The property contains scarce salt marsh habitat that support a number of waterfowl and shorebirds species in the San Francisco North Bay area, including a number of listed species.

LOCATION
The subject property is located east of the Napa River, along Eucalyptus Drive, on the western edge of the City of American Canyon, in Napa County. The property abuts up to the northeast edge of the DFG Napa-Sonoma Marshes Wildlife Area (Wildlife Area) at an area referred to as the American Canyon Unit salt plant site. Portions of the project site are encumbered with an easement for development and connection with the San Francisco Bay Trail in Napa County that runs along the eastern border of the Wildlife Area, north toward the City of Napa.

PROJECT DESCRIPTION
The original site was acquired from the Port of Oakland, with funding provided by a CALFED grant, requiring at least 70% of the property be deeded to DFG. The other 30% is being retained by the City of American Canyon as public open space. The property is being accepted by the DFG and will be assembled into the Wildlife Area. The property is predominately bay wetlands,

and there are no plans for any future restoration. The habitat on the property will support waterfowl and shorebird species, including California clipper rail, California black rail, salt marsh yellow throat and western snowy plover.

WCB PROGRAM

The proposed acquisition of this project is being made under the Land Acquisition Program at WCB. The Acquisition Program is administered pursuant to the WCB's original enabling legislation, the Wildlife Conservation Law of 1947 (Fish and Game Code Section 1300 et seq.), which gives the WCB the authority to acquire areas that can successfully sustain wildlife and provide for suitable recreation opportunities. Under this program, acquisition activities are carried out in conjunction with the DFG, which evaluates the biological values of property and whether or not to recommend it for funding.

MANAGEMENT OBJECTIVES AND NEEDS

The property will be assembled into the Wildlife Area and managed as tidal wetlands by the DFG. There are no pumps or hard structures on site requiring maintenance. The bay trail will be managed by the City of American Canyon. Because the property is primarily a wetland in its current condition, and is being assembled to wetland areas, any operation and maintenance costs are expected to be nominal and easily absorbed under the current operating and maintenance budget of the Wildlife Area.

TERMS

The original CALFED grant used to acquire the property was for $2,600,000.00. The grant funding terms allows for the protection, restoration and enhancement wetlands and the transfer of the property to DFG. Staff has reviewed the title documents and conferred with DFG staff, and have agreed to accept the property subject to the terms of the CALFED grant agreement.

PROJECT FUNDING

This is a non-cash transfer from the City of American Canyon to DFG. The purchase price is $0.00.

Other Project-Related Costs:	$10,000.00
TOTAL WCB Allocation	**$10,000.00**

It is estimated that $10,000.00 will be needed for internal project-related expenses, including title insurance, escrow fees, and review charges by the Department of General Services.

FUNDING SOURCE

The proposed funding source for this project is the Water Security, Clean Drinking Water, Coastal and Beach Protection Fund of 2002 (Proposition 50), Section 79572(c), which allows for protection of wetland habitat within the San Francisco Bay Area and is consistent with this project.

ENVIRONMENTAL COMPLIANCE AND STATE RECOMMENDATION
The project has been reviewed for compliance with the California Environmental Quality Act (CEQA) requirements and is proposed as exempt under CEQA Guidelines Section 15313, Class 13, as an acquisition of land for fish and wildlife conservation purposes, and under Section 15325, Class 25, as a transfer of an ownership interest in land to preserve open space and habitat. Subject to approval by the WCB, a Notice of Exception will be filed with the State Clearinghouse.

STAFF RECOMMENDATION
Staff recommended that the Wildlife Conservation Board approve this project as proposed; allocate $10,000.00 from the Water Security, Clean Drinking Water, Coastal and Beach Protection Fund of 2002 (Proposition 50), Section 79572(c), for internal project-related expenses; authorize staff to enter into appropriate agreements necessary to accomplish this project; and authorize staff and the Department of Fish and Game to proceed substantially as planned.

As one of the consent items heard at the beginning of the meeting, it was moved by Mr. McCamman that the Wildlife Conservation Board approve this project as proposed; allocate $10,000.00 from the Water Security, Clean Drinking Water, Coastal and Beach Protection Fund of 2002 (Proposition 50), Section 79572(c), for internal project-related expenses; authorize staff to enter into appropriate agreements necessary to accomplish this project; and authorize staff and the Department of Fish and Game to proceed substantially as planned.

Motion carried.

*13. Insectaries for Pollinators and Farm Biodiversity $73,000.00
Sonoma County

This proposal was to consider the allocation for a grant to Gold Ridge Resource Conservation District (Grantee) for a cooperative project with the Natural Resources Conservation Service, the Sonoma County Fish and Game Commission, the Community Alliance with Family Farmers, Farm Stewards and the landowners to restore and enhance wildlife and pollinator habitat by maximizing nesting and food sources for a variety of native bee species on eight privately owned properties located in Sonoma County.

LOCATION
The project is located in western Sonoma County in the Green Valley Creek Watershed, Salmon Creek Watershed, and Blucher Creek Watershed between the towns of Santa Rosa and Bodega Bay.

PROJECT DESCRIPTION

Native bees and other beneficial insects play an integral role in California farm industries, pollinating one-third of all food crops and numerous native plant species that compose the State's agricultural and biological diversity. Despite their significance, populations of native and European bees throughout the U.S. have crashed dramatically over the past several decades. Concerned for both their own farm productivity and the vitality of the landscape around them, innovative producers have sought to restore and enhance pollinator habitat and attract bees back to their farms.

This project represents a collaborative effort with the Gold Ridge Resource Conservation District (GRRCD), the Community Alliance with Family Farmers (CAFF), and Farm Stewards to create and improve substantial pollinator habitat on eight working farms in western Sonoma County. The partners will work with participating landowners to develop and implement Pollinator Farm Plans. These plans are comprehensive property assessments that will be designed to maximize nesting and food sources for a variety of native bee species while providing secondary benefits such as pest management, improved water and soil quality, and harvestable products. Efforts will focus on innovative applications of insectary habitat creation, such as drought-tolerant hedgerows on non-irrigated ranchland, and an emphasis on non-Pierce's disease host plants for vineyards. Particular emphasis will be given to habitat creation for native bee species, which have been shown to be resilient to many of the current threats to managed honeybees, and essential to many plant species throughout California. The project will include the creation of field borders, nesting structures, appropriate cover crop mixes, contour buffer strips and drift barriers, critical area planting, filter strips, riparian and farm pond revegetation, and pest management practices. Plantings will be specifically designed to provide year-round pollen and nectar sources and shelter for native bees and other pollinators, while also harboring other beneficial predatory insects that control crop pests. Planting areas will also provide essential wildlife corridors for birds and mammals, while improving riparian and pond habitat for aquatic species.

The project will take place on eight privately owned farms that represent a range of agricultural land uses, including conventional and organic vineyards, an organic orchard, organic vegetables, and grazed rangelands. The plantings will be installed to create insectary habitat throughout the eight properties, using available spaces that will expand riparian areas and provide wildlife corridors along fence lines.

WCB PROGRAM

This project is funded through the Ecosystem Restoration on Agricultural Lands Program and meets program's goal of assisting farmers in integrating agricultural activities with ecosystem restoration and wildlife protection.

MANAGEMENT OBJECTIVES AND NEEDS

The Grantee has agreed to manage and maintain the facilities for 25 years, pursuant to the terms and conditions of the grant. If at any time during the life of the project, the grantee is unable to manage and maintain the project improvements, they will refund to the State of California an amortized amount of funds based on the number of years left on the project life.

PROJECT FUNDING

The proposed funding breakdown for the project is as follows:

Wildlife Conservation Board	**$73,000.00**
Natural Resources Conservation Service	71,520.00
Sonoma County Fish and Wildlife Commission	7,495.00
Gold Ridge Resource Conservation District	8,400.00
Landowners	42,000.00
TOTAL Project Cost	**$202,415.00**

Project costs will be for planting and irrigation, nursery plants, materials, vegetation maintenance, and project signs; and project design, construction supervision, and administration.

FUNDING SOURCE

The proposed funding source for this project is the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Fund (Proposition 84), Section 75055(d)(4). This funding allows for assisting farmers in integrating agricultural activities with ecosystem restoration and wildlife protection, and is consistent with the objectives of this project.

ENVIRONMENTAL COMPLIANCE AND STATE RECOMMENDATION

This restoration project is exempt under Sections 15304 of the CEQA Guidelines because the project will consist of a minimal amount of earthmoving and there will be no negative impacts to the physical environment that would reduce its ability to produce native or agricultural plants. Subject to approval by the WCB, the appropriate Notice of Exemption will be filed with the State Clearinghouse. The DFG has reviewed this proposal and recommends it for funding by the WCB.

STAFF RECOMMENDATION

Staff recommended that the Wildlife Conservation Board approve this project as proposed; allocate $73,000.00 from the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Fund of 2006 (Proposition 84), Section 75055(d)(4); authorize staff to enter into appropriate agreements necessary to accomplish this project; and authorize staff and the Department of Fish and Game to proceed substantially as planned.

As one of the consent items heard at the beginning of the meeting, it was moved by Mr. McCamman that the Wildlife Conservation

Board approve this project as proposed; allocate $73,000.00 from the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Fund of 2006 (Proposition 84), Section 75055(d)(4); authorize staff to enter into appropriate agreements necessary to accomplish this project; and authorize staff and the Department of Fish and Game to proceed substantially as planned.

Motion carried.

*14. Goleta Slough Ecological Reserve Restoration, Augmentation and Change of Scope — $366,000.00
Santa Barbara County

This project was to consider the allocation for a funding augmentation and change of scope for a grant to the Land Trust of Santa Barbara County (LTSBC) for a cooperative project with the Army Corps of Engineer and the Federal Aviation Administration to restore and enhance the Department of Fish and Game's Goleta Slough Ecological Reserve (Reserve).

LOCATION

The project is located within the City of Goleta, adjacent to and south of the Goleta Airport, in Santa Barbara County. The Reserve area was once part of an estuarine ecosystem connected directly to the tidal influences of the Goleta Slough. During World War II, portions of the Reserve were filled in and developed, restricting tidal action and effectively eliminating the estuarine areas. More recently, the Reserve area was purchased by the California Department of Transportation as a potential highway route. Plans for the route were abandoned and the property was later conveyed to the DFG. Today, the Reserve functions mostly as a freshwater wetland and upland habitat, trapping rain and run-off water from surrounding development.

The Reserve is long and triangular in shape, bounded by the University of California, Santa Barbara (UCSB) on the south, Goleta Airport property to the west and the airport and light industrial uses to the north. A major thoroughfare, Los Carneros Road, runs north-south essentially through the middle of the reserve, dividing it into two main units connected by culverts, referred to as the West Unit and East Units.

PROJECT DESCRIPTION

The goal of project is to enhance and expand wetland habitat values throughout the 34.41 acres owned by the DFG in the Reserve by: (a) creating seven acres of new wetlands, (b) removing non-native plant species; (c) improving hydrologic conditions to sustain existing wetlands; (d) removing man-made features; (e) enhancing upland habitats adjacent to wetlands; (f) providing for future tide circulation opportunities; and (g) providing up to five years maintenance and monitoring to ensure the success of the project.

West Unit

The West Unit is approximately 12 acres in size. Work on the West Unit, referred to as Phase 1, entailed removal of fill materials, grading and contouring to expand and enhance wetland areas, culvert removal and improved water conveyance, removal of non-native plants and replanting of native vegetation within the wetland and upland areas, and construction of a public access trail with interpretive signs along the southern perimeter of the site. Most of the Phase 1 work on the West Unit is completed, though some infill planting, maintenance and monitoring are still required.

East Unit

The East Unit is approximately 22 acres and contains freshwater wetlands, upland areas and a tidally-influenced channel. The site also contains two old military bunkers and roads and parking areas that are used by the UCSB facilities operations. The proposed work on the east Unit includes creation of seven acres of new wetland; removal of non-native plants and planting of native vegetation; removal of the two old military world war two era bunkers, paved areas, rubble and fill; fencing; grading and contouring to enhance wetland areas; and installation of culverts and gates to improve water management along Mesa ditch, which provides muted tidal flows from Goleta Slough located near the south east portion of the site.

To date most of the necessary preconstruction work, including permits and a Remedial Action Plan to identify and test for hazardous materials, has been completed for the East Unit and the project is ready for construction. Already much of the site preparation, including removal of the bunkers and other improvements has occurred, along with removal of some of the invasive plants. The contract to begin the major restoration work on the wetland areas is in place and scheduled to occur in the fall and winter of 2010/11.

Change of Scope

As a result of an archeological survey on the site and the identification of potential sensitive areas (a Chumash Native American site), a larger than expected buffer areas was required that reduced the planned restoration site on the northwest side of the East Unit, reducing the amount of transitional wetland and upland areas planned for restoration by 1.75 acres. Total restoration acreage will be reduced from 26.26 acres to 24.51 acres.

WCB PROGRAM

The original grant and the augmentation for this project are being made under the WCB's Habitat Enhancement and Restoration Program. The Habitat Enhancement and Restoration Program (General) is the Board's general restoration program that includes native fisheries restoration and restoration of tidal or fresh wetland habitats, coastal scrub, grasslands, oak woodlands, and threatened and endangered species habitats. This authority is pursuant to the

Board's original enabling legislation, The Wildlife Conservation Law of 1947 (Fish and Game Section 1300, et seq).

MANAGEMENT OBJECTIVES AND NEEDS

The grant and restoration project requires five years of monitoring for performance. Over the first two years bi-monthly visits will be conducted by the LTSBC to determine the success of removing invasive species and the regrowth of new native species. After two years, site visits will occur quarterly. The target survival rate is 80% after five years. Bird surveys will also be conducted through the first five years. Annual reports will be provided to the WCB each November. Maintenance during the first five years will include maintaining newly planted areas, including temporary irrigation systems, weeding, repairs to fencing, trash removal, paths and temporary erosion control items. After five years, the DFG will take over maintenance responsibilities, which are expected to be minimal.

If at any time during the life of the project, the landowners are unable to manage and maintain the project improvements, they will refund to the State of California an amortized amount of funds based on the number of years left on the project life.

PROJECT FUNDING

The original budget total for the project was $1,738,312.00. The funding breakdown from the different partners was as follows:

Wildlife Conservation Board	**$ 903,312.00**
US Army Corps of Engineers	795,000.00
Federal Aviation Administration	40,000.00
TOTAL	**$1,738,312.00**

Of the original WCB grant approximately $260,000.00 remains unexpended.

Because of project delays related to obtaining permits, completing remediation for contaminated soil found onsite, and higher than expected prevailing wage costs, the total project cost has gone up by $996,000.00. The additional needed funds will come from the following:

Federal grant funds	$593,000.00
Wildlife Conservation Board	**366,000.00**
Federal Interest Accrued	37,000.00
Total additional funds	996,000.00
Total Project Cost	**$2,734,312.00**

Project costs will be primarily for completion of construction on the East Unit, entailing clearing, grading, contouring of land, installation of water control structures, planting, and maintenance and monitoring throughout the term of the agreement, which expires December 31, 2011.

FUNDING SOURCE

The proposed funding sources for this project are the Habitat Conservation Fund (Proposition 117), Section 2786(d) (Wetlands Outside the Central Valley, (P-50 SoCal) and the Water Security, Clean Drinking Water, Coastal and Beach Protection Fund of 2002 (Proposition 50), Section 79572(a), both of which provide funding for the protection, restoration or enhancement of wetland areas along the southern California coast.

ENVIRONMENTAL COMPLIANCE AND STATE RECOMMENDATION

The DFG has reviewed this proposal and recommends it for funding by the WCB. A coastal development permit has already been obtained from the California Coastal Commission for this project. The Department of Fish and Game, as lead agency, prepared a Negative Declaration for the original project pursuant to the provisions of the California Environmental Quality Act (CEQA). Staff considered the Negative Declaration for the project and has prepared proposed written findings documenting the WCB's compliance with CEQA. Upon approval by the WCB, the appropriate Notice of Determination will be filed with the State Clearinghouse.

STAFF RECOMMENDATION

Staff recommended that the Wildlife Conservation Board adopt the written findings and approve this project as proposed; allocate $300,000.00 from the Habitat Conservation Fund (Proposition 117), Section 2786(d) (Wetlands Outside the Central Valley, (P50 SoCal) and $66,000.00 from the Water Security, Clean Drinking Water, Coastal and Beach Protection Fund of 2002 (Proposition 50), Section 79572(a); authorize staff to enter into appropriate agreements necessary to accomplish this project; and authorize staff and the Department of Fish and Game to proceed substantially as planned.

As one of the consent items heard at the beginning of the meeting, it was moved by Mr. McCamman that the Wildlife Conservation Board adopt the written findings and approve this project as proposed; allocate $300,000.00 from the Habitat Conservation Fund (Proposition 117), Section 2786(d) (Wetlands Outside the Central Valley, (P50 SoCal) and $66,000.00 from the Water Security, Clean Drinking Water, Coastal and Beach Protection Fund of 2002 (Proposition 50), Section 79572(a); authorize staff to enter into appropriate agreements necessary to accomplish this project; and authorize staff and the Department of Fish and Game to proceed substantially as planned.

Motion carried.

*15. James San Jacinto Mountains Reserve Renovation $248,000.00
Riverside County

This proposal was to consider the allocation for a grant to the Regents of the University of California to purchase and install five new manufactured cabins and one laundry facility, make renovations to two existing buildings, and repair roads at the James San Jacinto Mountains Reserve, located in the San Jacinto Mountain Range approximately 10 miles south of the town of Banning in Riverside County.

LOCATION
James Reserve (Reserve) sits on an alluvial bench at the lower end of Hall Canyon, a steep western flank of Black Mountain, part of the San Jacinto Mountains. The Reserve hosts a wide variety of plant communities: Sierra mixed conifer forest, oak woodlands, montane chaparral, alder-willow-cedar riparian forest. A rapidly flowing mountain stream with a manmade reservoir (Lake Fulmor) is immediately downstream. The entire watershed is protected for research and study by the U.S. Forest Service (500 acres). The reserve has recorded 259 species of vascular plants, 35 bryophytes, 6 amphibians, 18 reptiles, 125 birds (60% nesting), 35 mammals, and over 1000 invertebrates. The Reserve is also home to one of the oldest and largest ponderosa pines in southern California, at around 500 years old and 200 feet tall.

PROJECT DESCRIPTION
The project will add five cabins to provide additional and longer-term accommodation for users, with one cabin having space to be used as a classroom facility. The project will also add a laundry facility for the residents with an outdoor access bathroom for day users. The renovations will take place at Lolomi Lodge and Trailfinder Lodge. Lolomi Lodge is an integral and historic part of the Reserve and provides vital housing for the resident director. The roof, flooring, and foundation all need to be replaced. The Trailfinder Lodge also needs renovation as it has long outgrown its original design purpose. It was originally only meant to provide dormitory style housing, but has since become the main office, library, and headquarters for the Reserve. The project will renovate the kitchen facilities, office, library, meeting room and roof. The project also includes site prep for the cabins, utilities, and roadway rehabilitation.

WCB PROGRAM
Under Proposition 84, the Wildlife Conservation Board (WCB) received funding to provide matching grant dollars to the University of California for the Natural Reserve System for land acquisitions, construction and development of facilities that will be used for research and training to improve the management of natural lands and the preservation of California's wildlife resources. The mission of the University of California, Natural Reserve System (UCNRS) is to contribute to the understanding and wise management of the earth and its

natural systems by supporting university-level teaching, research, and public service at protected areas throughout California. To implement this funding, the WCB and the UCNRS developed guidelines for selecting eligible projects. This also included establishment of a UCNRS Ad Hoc Advisory Subcommittee to review and set priorities for project proposals prior to submittal to the WCB.

MANAGEMENT OBJECTIVES AND NEEDS

The grantee has agreed to manage and maintain the facilities for 25 years, pursuant to the terms and conditions of the grant. If at any time during the life of the project, the grantee is unable to manage and maintain the project improvements, they will refund to the State of California an amortized amount of funds based on the number of years left on the project life.

PROJECT FUNDING

The proposed funding breakdown for the project is as follows:

Wildlife Conservation Board	**$248,000.00**
University of California, Riverside	248,000.00
TOTAL	**$496,000.00**

Project costs will be for site prep, utility upgrades, five manufactured cabins, one laundry facility, renovations to two existing buildings, roadway improvements, construction supervision, and administration.

FUNDING SOURCE

The proposed funding source for this project is the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Fund (Proposition 84), Section 75055(b)(3). This funding may be granted to the University of California for the Natural Reserve System for the construction and development of facilities that will be used for research and training to improve the management of natural lands and the preservation of California's wildlife resources and is consistent with the objectives of this project.

ENVIRONMENTAL COMPLIANCE AND STATE RECOMMENDATION

This project is exempt under Sections 15301 and 15303 of the CEQA Guidelines because the project will consist of less than 2,500 sq. ft. of new structures and less than six dwelling units and there will be no negative impacts to the physical environment. Subject to approval by the WCB, the appropriate Notice of Exemption will be filed with the State Clearinghouse. The project was vetted through the University of California Natural Reserve System's Ad Hoc Subcommittee and recommended for funding.

STAFF RECOMMENDATION

Staff recommended that the Wildlife Conservation Board approve this project as proposed; allocate $248,000.00 from the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Fund of 2006

(Proposition 84), Section 75055(b)(3); authorize staff to enter into appropriate agreements necessary to accomplish this project; and authorize staff and the Department of Fish and Game to proceed substantially as planned.

As one of the consent items heard at the beginning of the meeting, it was moved by Mr. McCamman that the Wildlife Conservation Board approve this project as proposed; allocate $248,000.00 from the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Fund of 2006 (Proposition 84), Section 75055(b)(3); authorize staff to enter into appropriate agreements necessary to accomplish this project; and authorize staff and the Department of Fish and Game to proceed substantially as planned.

Motion carried.

*16. Peninsular Bighorn Sheep $5,000.00
Riverside County

This proposal was to consider a cooperative project with the United States Fish and Wildlife Services (USFWS), Coachella Valley Mountains Conservancy, and the Department of Fish and Game (DFG), to acquire 947± acres of private land adjacent to the Santa Rosa and San Jacinto Mountains National Monument for the protection of habitat for the peninsular bighorn sheep. This acquisition is part of the Multiple Species Habitat Conservation Plan and Natural Community Conservation Plan approved for the Coachella Valley portion of Riverside County.

LOCATION
The property is located within the Santa Rosa Mountains and Coachella Valley, west of 77th Avenue, southwest of Old State Highway 86, west of the community of Oasis, and just west of the Salton Sea. Most of the property is surrounded by mountains, held by public agencies. The surrounding areas in the valley are mostly agriculture, with residential development located just to the east.

PROJECT DESCRIPTION
The subject property is mostly desert mountain area, sloping down into a fluvial plain with some follow vineyards located at the lower eastern portions of the property. The acquisition of the subject parcels will provide core habitat, linkages, and transport corridors which are important for the Peninsular Bighorn sheep (PBS). Placement of this area in public ownership will add a significant buffer from the developing residential lands to the east and north. The subject property has multiple species values including habitat for desert tortoise, least Bell's vireo, and the southwestern willow flycatcher. There is also potential habitat for several sensitive bat species including the western yellow bat, pallid bat, California leafnosed bat, spotted bat, pocketed free-tailed bat, and western

mastiff bat. Protection of the property would also benefit many other species that inhabit the area including mountain lion, mule deer, golden eagle, and prairie falcon.

WCB PROGRAM

The proposed acquisition of this project is being made under the Land Acquisition Program at WCB. The Acquisition Program is administered pursuant to the WCB's original enabling legislation, the Wildlife Conservation Law of 1947 (Fish and Game Code Section 1300, et seq.), which gives the WCB the authority to acquire areas that can successfully sustain wildlife and provide for suitable recreation opportunities. Under this program, acquisition activities are carried out in conjunction with the DFG, which evaluates the biological values of property and whether or not to recommend it for funding.

MANAGEMENT OBJECTIVES AND NEEDS

The DFG has identified the subject property as being within a Significant Natural Area and has recommended the purchase of the property which would be incorporated into and managed in conjunction with other existing wildlife areas and ecological reserves in the region. The subject property may be appropriate for both passive and consumptive recreational uses. The acquisition of the subject property, if approved, brings the total number of acres protected within the Santa Rosa and Santa Jacinto Mountains National Monument area to over 115,000 acres. Management costs will be covered and absorbed under the current regional operation and maintenance (O&M) budget.

TERMS

The owners have agreed to sell the property at the appraised value of $1,798,730.00, as approved by the Department of General Services (DGS). The USFWS will provide a Recovery Land Acquisition Program Grant, in an amount not to exceed $1,259,111.00 to be applied toward the purchase price of the property. The Coachella Valley Mountains Conservancy has agreed to provide funds in the amount of no less than $539,619.00 to assist in this acquisition. The terms and conditions of the proposed grants provide that staff of the WCB will review and approve all title documents, appraisals, preliminary title reports, documents for purchase and sale, escrow instructions and instruments of conveyance prior to disbursement of funds directly into the escrow account established for the acquisition.

PROJECT FUNDING

The proposed funding breakdown for the project is as follows:

USFWS Section 6 Grant (E-27-RL-3)	$1,259,111.00
Coachella Valley Mountains Conservancy Grant	539,619.00
TOTAL Purchase Price	$1,798,730.00
Other Project-related Costs:	5,000.00

TOTAL WCB Allocation **$5,000.00**

It is estimated that an additional $5,000.00 will be needed to cover internal project-related expenses, including DGS review costs, bringing the total recommended allocation for this proposal to $5,000.00.

FUNDING SOURCE
The purposes of this project are consistent with the proposed funding source, California Clean Water, Clean Air, Safe Neighborhood Parks and Coastal Protection Fund (Proposition 40), Section 5906.650 that allows for grants to protect habitat corridors and prevent habitat fragmentation.

ENVIRONMENTAL COMPLIANCE AND STATE RECOMMENDATION
The acquisition has been reviewed for compliance with the California Environmental Quality Act (CEQA) requirements and is proposed as exempt under CEQA Guidelines Section 15313, Class 13, as an acquisition of land for wildlife conservation purposes, and Section 15325, Class 25, as a transfer of an ownership interest in land to preserve open space. Subject to authorization by the WCB, a Notice of Exemption will be filed with the State Clearinghouse. The project has been reviewed by DFG through the establishment and approval of the NCCP and has been recommended for approval.

STAFF RECOMMENDATION
Staff recommended that the Wildlife Conservation Board approve the project as proposed; approve the acceptance of a Recovery Land Acquisition Program Grant from USFWS in the amount of $1,259,111.00; allocate $5,000.00 from the California Clean Water, Clean Air, Safe Neighborhood Parks and Coastal Protection Fund (Proposition 40), Section 5906.650 to cover internal project-related expenses; authorize staff to enter into appropriate agreements necessary to accomplish this project; and authorize staff and the Department of Fish and Game to proceed substantially as planned.

As one of the consent items heard at the beginning of the meeting, it was moved by Mr. McCamman that the Wildlife Conservation Board approve the project as proposed; approve the acceptance of a Recovery Land Acquisition Program Grant from USFWS in the amount of $1,259,111.00; allocate $5,000.00 from the California Clean Water, Clean Air, Safe Neighborhood Parks and Coastal Protection Fund (Proposition 40), Section 5906.650 to cover internal project-related expenses; authorize staff to enter into appropriate agreements necessary to accomplish this project; and authorize staff and the Department of Fish and Game to proceed substantially as planned.

Motion carried.

*17. East Elliott and Otay Mesa Regions (Sunroad) $5,000.00
San Diego County

This proposal was to consider the acceptance of a U.S. Fish and Wildlife Service Habitat Conservation Planning Land Acquisition grant and the approval to subgrant $67,200.00 of the federal funds to the City of San Diego (City) to assist with the acquisition of 1± acre of land to protect critical regional wildlife linkages, coastal sage scrub, and to protect and preserve core areas of vernal pool habitat that will enhance the existing Multiple Species Conservation Program (MSCP) area.

LOCATION
The subject property is located on the western Otay Mesa, south of Highway 905 and east of Highway 805 within the San Diego city limits. The property is within a Mutli-Species Conservation Plan (MSCP) that is a joint federally approved Habitat Conservation Plan and a state approved Natural Community Conservation Plan (NCCP). The MSCP covers approximately 900 square miles in southwestern San Diego County and includes the City of San Diego, portions of the unincorporated County of San Diego, and ten other local jurisdictions. The planning area is bordered by Mexico to the south, National Forest lands to the east, the Pacific Ocean to the west, and the San Dieguito River Valley to the north.

The City of San Diego, along with 12 other local jurisdictions, developed the MSCP to address potential impacts from increased development and related infrastructures and the need to protect and preserve important habitat areas and corridors within the 900 square mile area covered under the plan. Together with the wildlife agencies, the local communities developed a conservation plan that addresses both development and wildlife needs within the planning area, along with individual subarea plans that provide the details on how each jurisdiction will implement the plan within their boundaries.

PROJECT DESCRIPTION
The Otay Mesa is a core biological resource in southern San Diego County, but is under threat from nearby development and related external impacts. Protection and preservation of properties on the Otay Mesa and surrounding area is critical to maintaining the regional wildlife linkages, coastal sage scrub, and vernal pool habitat that will further the objectives of the MSCP. Acquisition of the subject property will contribute to the protection of critical habitat used by many sensitive species found in the area. Among these are the California gnatcatcher, San Diego fairy shrimp and the burrowing owl. Acquisition of this property will also benefit several are and/or narrow endemic species within the County's subarea plan. San Diego thornment, willow monardella, Otay mesa mint, and the Otay tarplant are only found in San Diego County. Orcutt's grass is limited to a very few locations, with one of the main sites located within the proposed acquisition area on the Otay Mesa.

WCB PROGRAM

The proposed acquisition of this project is being made under the Land Acquisition Program at WCB. The Acquisition Program is administered pursuant to the WCB's original enabling legislation, the Wildlife Conservation Law of 1947 (Fish and Game Code Section 1300 et seq.). The acquisition program enables the WCB to pursue acquistions on behalf of the DFG, accept federal grant funds to facilitate acquisitions or subgrant the federal funds to assist with acquisitions as recommended by the DFG, provide State bond funding to assist in proposed acquisitions and to cover its project-related expenses.

MANAGEMENT OBJECTIVES AND NEEDS

The subject property is bordered on the west and south side by matching City-owned and managed one acre properties. The City will manage the property in accordance with the MSCP adopted in 1997. The City currently monitors and manages over 20,000 acres of City-owned lands. The subject property will be added to this responsibility. It is anticipated that once the acquisition is complete and the biological values of the property are evaluated, appropriate public access will be considered.

TERMS

The property owner has agreed to sell the property for the Department of General Services (DGS) approved appraised fair market value of $105,000.00. The terms and conditions of the proposed subgrant to the City provide that staff of the WCB will review and approve all title documents, appraisals, preliminary title reports, documents for purchase and sale, escrow instructions and instruments of conveyance prior to disbursement of funds directly into the escrow account established for the acquisition.

PROJECT FUNDING

The proposed funding breakdown for the project is as follows:

Wildlife Conservation Board (USFWS Subgrant)	**$67,200.00**
City of San Diego	37,800.00
TOTAL Purchase Price	$105,000.00
Other Project-related Costs:	5,000.00
TOTAL WCB Allocation	**$5,000.00**

It is estimated that $5,000.00 will be needed to cover internal project-related expenses, including DGS appraisal review costs.

FUNDING SOURCE

The proposed funding source for this project is the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Fund of 2006 (Proposition 84), Section 75055(c) that provides funding for grants to

implement or assist in the establishment of NCCPs and is consistent with the objectives of this project.

ENVIRONMENTAL COMPLIANCE AND STATE RECOMMENDATION
The acquisition has been reviewed for compliance with the California Environmental Quality Act (CEQA) requirements and is proposed as exempt under CEQA Guidelines Section 15313, Class 13, as an acquisition of land for wildlife conservation purposes, and Section 15325, Class 25, as a transfer of an ownership interest in land to preserve open space. Subject to authorization by the WCB, a Notice of Exemption will be filed with the State Clearinghouse. The Department of Fish and Game has reviewed this proposal and recommends it for approval.

STAFF RECOMMENDATION
Staff recommended that the Wildlife Conservation Board approve this project as proposed; authorize acceptance of the Habitat Conservation Planning Land Acquisition Grant from the U.S. Fish and Wildlife Service and approve the Agreement to Subgrant in the amount of $67,200.00 to the City of San Diego; allocate $5,000.00 from the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Fund of 2006 (Proposition 84), Section 75055(c) to cover internal project-related expenses; authorize staff to enter into appropriate agreements necessary to accomplish this project; and authorize staff and the Department of Fish and Game to proceed substantially as planned.

As one of the consent items heard at the beginning of the meeting, it was moved by Mr. McCamman that the Wildlife Conservation Board approve this project as proposed; authorize acceptance of the Habitat Conservation Planning Land Acquisition Grant from the U.S. Fish and Wildlife Service and approve the Agreement to Subgrant in the amount of $67,200.00 to the City of San Diego; allocate $5,000.00 from the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Fund of 2006 (Proposition 84), Section 75055(c) to cover internal project-related expenses; authorize staff to enter into appropriate agreements necessary to accomplish this project; and authorize staff and the Department of Fish and Game to proceed substantially as planned.

Motion carried.

18. Cow Creek Conservation Area, Expansion 2 $1,340,000.00
Shasta County

Mr. Donnelly reported that letters of support for this project were received from Alan A. Forkey, Assistant State Conservationist for Programs, Natural Resources Conservation Services, United States Department of Agriculture; and Mary Pfeiffer, Agricultural Commissioner/Sealer, Shasta County Department of Agriculture/Weights & Measures.

This proposal was to consider the allocation for a grant to the American Land Conservancy (ALC) for a cooperative project with the Natural Resource Conservation Service and the Department of Fish and Game (DFG) to acquire a conservation easement over 5,868± acres of land for protection of rangeland, riparian corridors and other significant ecosystems. Mr. Bill Gallup of the Wildlife Conservation Board briefly described the project and its location.

LOCATION
The subject property is a privately owned rangeland parcel located in the Cascade Range foothills, north of State Highway 44 about 10 miles east of the City of Redding in Shasta County. The parcel is more specifically located on Whitmore Road, north of Millville, north of highway 44. The property is bisected by two creeks Old Cow Creek and Clover Creek. Each creek runs through the property in an east to west direction and ultimately both flow to the Sacramento River. The property has been operated as a ranch, grazed and farmed, since the 1860's. Current land uses in the area includes agriculture, recreation, residential, natural areas and water supplies.

The property is part of the DFG Cow Creek Conceptual Area Protection (CAPP) that includes a combination of blue oak woodlands, chaparral, mixed conifer, riparian, aquatic, vernal pools and grasslands habitats that support sensitive species and significant populations of native fish and wildlife. There have been two major acquisitions within the Cow Creek CAPP including Cow Creek Ranch totaling about 5,000 acres (adjacent to JS Ranch) and the Hathaway Ranch totaling about 6,600 acres. The Shasta Land Trust is expecting to close on a third property, the Richert Ranch, totaling about 5,000 acres, in the next few months. Including this proposed conservation easement, the total protected area in the Cow Creek CAPP will be in excess of 22,000 acres after the completion of this project.

PROJECT DESCRIPTION
The property contains developed springs and irrigation ditches that provide water to large tracts of land that parallel the creeks on the property. There are a number of miscellaneous barn and farm structures on site that support the ranch operation. This project will help create a landscape-scale reserve that contains a variety of different habitats, including oak woodland, chaparral, mixed conifer, riparian, grassland and aquatic habitats. These habitat areas

will support multiple species of plants and animals, including deer and mountain lion, as well as fall-run, late-fall run Chinook salmon and steelhead trout.

WCB PROGRAM

The proposed grant for this project is being made under the Land Acquisition Program at WCB. The Acquisition Program is administered pursuant to the WCB's original enabling legislation, the Wildlife Conservation Law of 1947 (Fish and Game Code Section 1300 et seq.) to acquire areas that can successfully sustain wildlife and provide for suitable recreational opportunities. Under this program, acquisition activities are carried out in conjunction with the DFG, evaluating the biological values of property through either development of a Land Acquisition Evaluation (LAE) or a CAPP. The LAE/CAPP is then submitted to the DFG Regional Operation Committee (ROC) for review and approval and later transmitted to the WCB with a recommendation to fund.

MANAGEMENT OBJECTIVES AND NEEDS

ALC will manage the conservation easement over property for the benefit of threatened and endangered species. The grazing use will continue into perpetuity and ALC will monitor for compliance of the terms and conditions of the easement. The owners of the property will be donating an endowment for monitoring the easement. ALC will eventually transfer the easement interest with all of the terms and conditions as well as the endowment over to the California Rangeland Trust. Because this is an easement on private land, public access will be restricted.

TERMS

The property owner has agreed to sell a conservation easement to ALC for the Department of General Services (DGS) approved appraised fair market value of $2,640,000.00 The terms and conditions of the proposed grant to ALC provides that staff of WCB will review and approve all title documents, appraisals, preliminary title reports, documents for purchase and sale, escrow instructions and instruments of conveyance prior to disbursement of funds directly into the escrow account established for the acquisition. In the event of breach of the grant terms the WCB can encumber the property with a conservation easement and seek reimbursement of funds.

PROJECT FUNDING

Wildlife Conservation Board	**$1,320,000.00**
Natural Resource Conservation Service	1,320,000.00
Total Purchase Price:	$2,640,000.00
Other Project-related Costs:	20,000.00
TOTAL WCB Allocation	**$1,340,000.00**

This is estimated that $20,000.00 will be needed to cover internal project-related costs, including the Department of General Services review costs.

FUNDING SOURCE
The proposed funding source for this project is the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Projection Fund of 2006 (Proposition 84), Section 75055(b), which provides funding for grants for the protection of wildlife corridors, significant natural landscapes and the protection endangered and threatened species, and is consistent with the objectives of this project.

ENVIRONMENTAL COMPLIANCE AND STATE RECOMMENDATION
The acquisition has been reviewed for compliance with the California Environmental Quality Act (CEQA) requirements and is proposed as exempt under CEQA Guidelines Section 15313, Class 13, as an acquisition of land for wildlife conservation purposes, and Section 15325, Class 25, as a transfer of an ownership interest in land to preserve open space. Subject to authorization by the WCB, a Notice of Exemption will be filed with the State Clearinghouse. The project has been reviewed and approved for funding by WCB staff.

STAFF RECOMMENDATION
Staff recommended that the Wildlife Conservation Board approve this project as proposed; allocate $1,340,000.00 from the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Projection Fund of 2006 (Proposition 84), Section 75055(b) for the grant and internal project-related expenses; authorize staff to enter into appropriate agreements necessary to accomplish this project; and authorize staff and the Department of Fish and Game to proceed substantially as planned.

Mr. Gallup introduced Mr. Ed Stanton, Program Manager from American Land Conservancy, and Mr. & Mrs. George McArthur, the property owners, who were in the audience and available to answer questions.

Ms. Finn asked if public access on the property is restricted or prohibited. Mr. Gallup responded that there won't be any public access on the property. Mr. McCamman asked if this property will be eventually transferred to the Rangeland Trust. Mr. Gallup confirmed. Mr. McCamman asked if there is a time line on that. Mr. Gallup replied that he does not have a specific time line and asked Mr. Stanton to provide more information. Mr. Stanton introduced himself before the Board and responded that the transfer to the California Rangeland Trust has not been determined at this point. Mr. Stanton also said that American Land Conservancy has some projects funded by National Fish and Wildlife Foundation, and this is follow-up work on the ranch to do some habitat improvement and planning work and that may alter the timing to transfer the easement. Mr. McCamman asked if this is consistent with the California Rangeland Trust goals and objectives. Mr. Stanton confirmed that this is

correct and added that the American Land Conservancy is working closely with the California Rangeland Trust, and that the American Land Conservancy totally qualified to hold this easement and endowment. Mr. Stanton also added that the endowment will be transferred with the easement.

Mr. McCamman asked if there were any questions about this item. There were none.

It was moved by Ms. Finn that the Wildlife Conservation Board approve this project as proposed; allocate $1,340,000.00 from the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Projection Fund of 2006 (Proposition 84), Section 75055(b) for the grant and internal project-related expenses; authorize staff to enter into appropriate agreements necessary to accomplish this project; and authorize staff and the Department of Fish and Game to proceed substantially as planned.

Motion carried.

19. Red Bank Creek $3,960,000.00
Tehama County

Mr. Donnelly reported that letters of support were received for this project from the following people: Tracy K. Schohr, Rangeland Conservation Director, CA Cattlemen Association; and Pelayo Alvarez, Conservation Program Director, Defenders of Wildlife.

This proposal was to consider an allocation for a grant to the Northern California Regional Land Trust (NCRLT) to acquire conservation easements over 7,132± acres of two contiguous ownerships (3,356± acres Burrow Ranch and 3,776± acres Big Bluff Ranch) in Tehama County. The project will allow the continued operations of the ranches and at the same time protect important oak woodland habitat areas, and maintain the property's relatively natural, scenic, and open-space characteristics. Mr. Randy Nelson of the Wildlife Conservation Board briefly described the project and its location.

LOCATION
The ranches are located approximately 20 miles southwest of the City of Red Bluff, seven miles west of the town of Red Bank, along Colyear and Red Bank Roads, in Tehama County. Most of the surrounding lands comprise ranches similar to those to be protected by this project. To the north, the project area abuts over 6,000 acres of protected Bureau of Land Management land and another 1,017 acres that is part of the Mendocino National Forest.

PROJECT DESCRIPTION
An estimated 60 to 70 percent of the acreage is occupied by individual oak trees, oak savannah, or oak woodland. Oak tree species present within the project area include black, valley, interior live, canyon live, blue, scrub, and tan. The project would also protect annual grassland, farmland, chamise-redshank chaparral, mixed chaparral, valley-foothill riparian land, spring-fed wetlands and creek frontage along Red Bank and North Fork Elder Creeks and a number of other perennial and seasonal creeks.

WCB PROGRAM
This project funding proposal was submitted to the Wildlife Conservation Board through its Oak Woodlands Conservation Program. The project is reviewed and approved by WCB staff, and must be located within a county that has adopted an Oak Woodlands countywide conservation plan. The Program is designed to help local efforts to achieve oak woodland protection. More importantly, this program provides a mechanism to bring ranchers and conservationists together in a manner that allows the achievement of both sustainable ranch and farming operations and healthy oak woodlands. The project meets the objectives of the Oak Woodland Conservation Program by conserving some 4,275 contiguous acres of oak woodlands and allowing for the continued ranching and farming operations on the land. Because this is an easement of a private land, public access will be restricted.

In May 2010, the WCB authorized a grant to the California Association of Resource Conservation Districts for a cooperative project with the Department of Fish and Game, U.S. Fish and Wildlife Service, Audubon Society and the landowners to restore riparian habitat, reduce sedimentation and streambank erosion and improve water quality along Red Bank Creek. This project will complement those restoration improvements and will improve the wildlife values the restoration project aims to enhance.

MANAGEMENT OBJECTIVES AND NEEDS
The NCRLT will hold, manage and be responsible for the monitoring of the easement in perpetuity per the WCB grant terms. A baseline report will have been completed by the Grantee and approved by the WCB. The conservation easement deed allows access to the subject properties by both the NCRLT and the WCB for monitoring purposes.

TERMS
The property owners have agreed to sell conservation easement over their properties to the NCRLT for the Department of General Services (DGS) approved appraised fair market values of $1,850,000.00 and $2,100,000.00, respectively. Combined the total purchase is $3,950,000.00. The terms and conditions of the proposed grant to the NCRLT provide that staff of the WCB will review and approve all title documents, appraisals, preliminary title reports, documents for purchase and sale, escrow instructions and instruments of

conveyance prior to disbursement of funds directly into the escrow account established for the acquisition. In the event of breach of the grant terms, the WCB can seek specific performance or require that title to the conservation easement be transferred to the WCB or another qualifying entity. The project lands are encumbered by Land Conservation Contracts under the Williamson Act that are not affected by the terms of the easement.

PROJECT FUNDING
The WCB proposes to make a grant to NCRLT for the full amount of the purchase price:

WCB Grant	**$3,950,000.00**
Other Project-related Costs:	10,000.00
TOTAL WCB Allocation	**$3,960,000.00**

It is estimated that $10,000.00 will be needed to cover internal project-related costs including the appraisal review costs by the DGS.

FUNDING SOURCE
The proposed funding source for this project is the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Fund of 2006 (Proposition 84), Section 75055(d)(2), that allows for the acquisition of conservation easements on agricultural properties for the protection of oak woodland habitat and is consistent with the purposes of this project.

ENVIRONMENTAL COMPLIANCE AND STATE RECOMMENDATION
The acquisition has been reviewed for compliance with the California Environmental Quality Act (CEQA) requirements and is proposed as exempt under CEQA Guidelines Section 15313, Class 13, as an acquisition of land for wildlife conservation purposes, and Section 15325, Class 25, as a transfer of an ownership interest in land to preserve open space. Subject to authorization by the WCB, a Notice of Exemption will be filed with the State Clearinghouse. The project has been reviewed under the WCB's Oak Woodlands Conservation Program and has been recommended for approval.

STAFF RECOMMENDATION
Staff recommended that the Wildlife Conservation Board approve this project as proposed; allocate $3,960,000.00 from the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Fund of 2006 (Proposition 84), Section 75055(d)(2) to cover the grant amount and internal project-related expenses; authorize staff to enter into appropriate agreements necessary to accomplish this project; and authorize staff and the Department of Fish and Game to proceed substantially as planned.

Mr. Nelson introduced Mr. Jamison Watts, Executive Director of the Northern California Rangeland Trust, who was in the audience and available to answer questions.

Ms. Finn asked if public access will be allowed in the property. Mr. Nelson replied that this easement does not provide for public access. Mr. Nelson added that the NCRT will be allowed on the property with members of the public periodically for educational purposes. Ms. Finn asked if the lands are under Williamson Act contract. Mr. Nelson confirmed that this is correct. Ms. Finn asked what happens with the conservation easement – will this contract be canceled or does it remain in place. Mr. Nelson responded that the contract remains in place. Mr. Donnelly added that Wildlife Conservation Board does two things when we either acquire a conservation easement or give grants for conservation easements or acquire fee title for the Department of Fish and Game, we have the obligation to notify both the Department of Conservation, which we have done, as well as the counties in which Williamson contracts apply.

Mr. McCamman asked if there were any questions or comments about this project. There were none.

It was moved by Ms. Finn that the Wildlife Conservation Board approve this project as proposed; allocate $3,960,000.00 from the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Fund of 2006 (Proposition 84), Section 75055(d)(2) to cover the grant amount and internal project-related expenses; authorize staff to enter into appropriate agreements necessary to accomplish this project; and authorize staff and the Department of Fish and Game to proceed substantially as planned.

Motion carried.

20. Heart K Ranch $1,090,000.00
Plumas County

Mr. Donnelly reported that letters of support were received for this project from the following people: Don Williamson, Indian Valley Recreation & Parks District Board Chair; and Brian L. Morris, General Manager, Plumas County Flood Control & Water Conservation District.

This proposal was to consider the acquisition by the Department of Fish and Game (DFG) of a conservation easement over 880± acres in Plumas County. The conservation easement would restrict future development and help insure that the biological and cultural resources found on the property are protected in perpetuity. The DFG will hold and monitor the conservation easement.

Mr. Brian Gibson of the Wildlife Conservation Board briefly described the project and its location.

LOCATION

The Heart K Ranch is located in Plumas County, approximately 2 hours north of the town of Truckee, 45 minutes north east from the town of Quincy, and 15 minutes east of the small down of Taylorsville. It is a top priority property within the DFG Genesee Valley Conceptual Area Protection Plan (CAPP). Genesee Valley is characterized by a large (~3,000 acres) relatively level mountain valley, bisected by Indian Creek, and surrounded on all sides by coniferous and oak forests. The north side of the Genesee Valley contains unique geologic features including large talus slopes. The mountains to the south side are dominated by dense, Douglas-fir dominated mixed conifer forests. Land uses surrounding the Heart K Ranch are primarily agriculture (ranching) with some private residences interspersed as single lots or small subdivisions. Forest lands bordering the north and south of the property are open for public use and administered by the Plumas National Forest.

PROJECT DESCRIPTION

This conservation easement will preserve and protect in perpetuity a variety of animal and plant habitat. Terrestrial and riparian vegetation types around the Heart K Ranch include mixed conifer forests and black oak woodlands along upland portions of the property. These forested habitat types transition to perennial grasslands, wet meadows, and eventually the montane riparian and river habitats associated with Indian Creek, which flows through the center of the ranch. The habitat types support a wide range of terrestrial and aquatic species, including both State and federal species of special concern.

The riparian area and associated cottonwood-willow riparian habitats along Indian Creek support a large colony of state threatened bank swallow as well as state endangered willow flycatcher. The pastures and grasslands adjacent to the riparian area have regular occurrences of greater sandhill crane and bald eagle. In combination with upland conifer and hardwood forests, these habitat types provide nesting and foraging habitat for several birds of prey, including the golden eagle, northern goshawk, Cooper's hawk, and the California spotted owl. Indian Creek currently supports six species of native fishes, which include: hardhead, Sacramento pikeminnow, speckled dace, riffle sculpin, Sacramento sucker, and rainbow trout. The property also supports a highly diverse assemblage of mammal species, including Sierra Nevada mountain beaver, southwestern river otter, beaver and ringtail. There are several more common land mammals, including black bear, bobcat, mountain lion, grey fox, and blacktail deer, which are abundant throughout Heart K Ranch year-round.

WCB PROGRAM

The proposed acquisition of this project is being made under the Land Acquisition Program at WCB. The Acquisition Program is administered

pursuant to the WCB's original enabling legislation, the Wildlife Conservation Law of 1947 (Fish and Game Code Section 1300 et seq.) to acquire areas that can successfully sustain wildlife and provide for suitable recreation opportunities. Under this program acquisition activities are carried out in conjunction with the DFG, evaluating the biological values of property through development of a Conceptual Area Protection Plan (CAPP). The CAPP is then submitted to DFG's Regional Operations Committee (ROC) for review and approval and later transmitted to the WCB with a recommendation to fund.

MANAGEMENT OBJECTIVES AND NEEDS

The DFG will hold title to the conservation easement and will monitor the property on an annual basis to ensure that conservation easement conditions are being met. The Feather River Land Trust, which owns the property, has agreed to fully fund an endowment which will pay all costs associated with monitoring the conservation area.

TERMS

The property owner has agreed to sell the conservation easement to the DFG for less than the Department of General Services (DGS) approved appraised fair market value of $2,200,000.00. The DFG will acquire the conservation easement for $1,075,000.00, with a landowner donation (bargain sale) of $1,125,000.00. The terms and conditions of the proposed property acquisition agreement provide that staff of the WCB will review and approve all title documents, appraisals, preliminary title reports, documents for purchase and sale, escrow instructions and instruments of conveyance prior to disbursement of funds directly into the escrow account established for the acquisition. Additionally, DFG staff will be responsible for monitoring the property at least once annually.

PROJECT FUNDING

The proposed funding breakdown for the project is as follows:

Wildlife Conservation Board	**$1,075,000.00**
Landowner donation (bargain sale)	1,125,000.00
TOTAL Purchase Price	$2,200,000.00
Other Project-related Costs:	15,000.00
TOTAL WCB Allocation	**$1,090,000.00**

It is estimated that an additional $15,000.00 will be needed to cover project-related expenses, including DGS review costs and escrow fees.

FUNDING SOURCE

The proposed funding source for this project is the Habitat Conservation Fund (Proposition 117), Section 2786 (a)(1E) that provides funding for protection of deer, mountain lion, oak habitats, and preservation of wildlife values within a floodplain or flood corridor, and is consistent with the objectives of this project.

ENVIRONMENTAL COMPLIANCE AND STATE RECOMMENDATION
The acquisition has been reviewed for compliance with the California Environmental Quality Act (CEQA) requirements and is proposed as exempt under CEQA Guidelines Section 15313, Class 13, as an acquisition of land for wildlife conservation purposes, and Section 15325, Class 25, as a transfer of an ownership interest in land to preserve open space. Subject to authorization by the WCB, a Notice of Exemption will be filed with the State Clearinghouse. The Department of Fish and Game has reviewed this proposal and recommends it for approval.

STAFF RECOMMENDATION
Staff recommended that the Wildlife Conservation Board approve this project as proposed; allocate $1,090,000.00 form the Habitat Conservation Fund (Proposition 117), Section 2786(a)(1E) to cover the acquisition and internal project-related expenses; authorize staff to enter into appropriate agreements necessary to accomplish this project; and authorize staff and the Department of Fish and Game to proceed substantially as planned.

Mr. Gibson introduced Mr. Paul Hardy, Executive Director of the Feather River Land Trust, who was in the audience and available to answer questions.

Ms. Finn asked how the Feather River Land Trust acquired the property. Mr. Gibson responded that the property was purchased from The Nature Conservancy, and The Nature Conservancy acquired the property from a private landowner. Mr. McCamman asked if the WCB was involved in earlier transactions. Mr. Gibson replied that it was not. Ms. Finn asked if public money was used in either of the previous transactions.

Mr. Hardy introduced himself before the Board and commented that only private money was involved with The Nature Conservancy acquisition and Feather River Land Trust subsequent acquisition. Mr. McCamman asked if an endowment will be established to cover DFG's costs for monitoring. Mr. Hardy confirmed that this is correct, but the contract has not been finalized yet.

Mr. McCamman asked if there were any questions or comments about this item. There were none.

It was moved by Ms. Finn that the Wildlife Conservation Board approve this project as proposed; allocate $1,090,000.00 from the Habitat Conservation Fund (Proposition 117), Section 2786(a)(1E) to cover the acquisition and internal project-related expenses; authorize staff to enter into appropriate agreements necessary to accomplish this project; and authorize staff and the Department of Fish and Game to proceed substantially as planned.

Motion carried.

21. Upper Butte Basin Wildlife Area, Expansion 6 $1,120,000.00
Butte County

This proposal was to consider for the acquisition of 222± acres of land for the Department of Fish and Game (DFG), for the protection of wetland habitat and as an expansion to the Upper Butte Basin Wildlife Area (UBBWA). The property will provide habitat for waterfowl, shorebirds and riparian songbirds and will contribute to the public use and other management objectives of the UBBWA. Mr. Randy Nelson of the Wildlife Conservation Board briefly described the project and its location.

LOCATION
The subject property is located approximately five miles west of the City of Biggs, in Butte County. The site is next to Cherokee Canal, and fronts the southerly side of Schohr Ranch Road, a gravel roadway that provides access to the property from Afton-Biggs Road. The DFG Upper Butte Basin Wildlife Area (UBBWA), which the property will be a part of, is open to the public and allows for waterfowl hunting and other outdoor wildlife related uses. The surrounding lands consist mostly of farm, mostly rice farms, and hunting clubs.

PROJECT DESCRIPTION
The UBBWA contains a mosaic of diverse and moist soil habitat that provides quality vegetation for wintering waterfowl, wading birds, and shorebirds. The project area will provide nesting areas and brood ponds for breeding waterfowl and other resident wetland related wildlife, and riparian habitat. The project will benefit mallards, gadwall, American green-winged teal, cinnamon teal, northern pintail, northern shoveler, American wigeon, riparian songbirds, white faced ibis and the long-billed curlew.

The property is currently encumbered by a conservation easement held by the DFG. Because of its location to the Cherokee Canal, and the facilities for water conveyance and appropriation, both current and future, this property could be an integral part of the overall water management on the UBBWA. For these reasons, DFG requested that staff of the Wildlife Conservation Board (WCB) negotiate a Right of First Refusal as part of the original easement project. Consequently, the land owner notified the DFG of his intent to sell a portion of the property, and the DFG has recommended that we pursue acquisition.

In addition to waterfowl and other wildlife diversity found on site, this particular property is significant for ownership by the DFG because of the water infrastructure located within its boundaries. The property hosts an important pumping facility at its southwest boundary that appropriates/diverts water from the Cherokee Canal to the existing properties of the UBBWA. While the DFG maintains an easement for the use of this pumping facility, the landowner and UBBWA staff has made improvements to the water infrastructure to allow water to be diverted through existing ditches across the property for the benefit of the

UBBWA. The diversion and eventual flow into the UBBWA is by way of gravity flow ditch, thus reducing pumping costs and maintenance the DFG would otherwise incur. If the property were sold to another land owner, the DFG may not have the ability to access or improve the property's infrastructure to meet current and /or future water needs. This could significantly increase the costs of providing water to the area while at the same time reducing overall habitat and species management.

WCB PROGRAM

This project funding proposal is being made through the Wildlife Conservation Board's Inland Wetland Conservation Program. The Inland Wetlands Conservation Program (IWCP) was created to assist the Central Valley Joint Venture (CVJV), a federal entity, with specific goals to increase populations of wintering waterfowl, breeding waterfowl, non-breeding shorebirds, breeding shorebirds, waterbirds, and breeding riparian songbirds. The project meets the objectives of the IWCP by protecting habitat for waterfowl, shorebirds and riparian songbirds.

MANAGEMENT OBJECTIVES AND NEEDS

The Department of Fish and Game will manage these additional 222 acres as part of the Little Dry Creek Unit of the UBBWA, as a mixture of seasonal wetlands, semi-permanent wetlands, upland and riparian habitats. The property will be managed with existing DFG staff working on the UBBWA.

TERMS

The property owner has agreed to sell the property for the Department of General Services (DGS) approved appraised fair market value of $1,110,000.00.

The terms and conditions of the proposed acquisition provide that staff of the WCB review and approve all title documents, appraisals, preliminary title reports, documents for purchase and sale, escrow instructions and instruments of conveyance prior to disbursement of funds directly into the escrow account established for the acquisition. The property is encumbered by a Land Conservation Contract under the Williamson Act, and notification has been provided accordingly to the Department of Conservation.

PROJECT FUNDING

The WCB will be funding the entire purchase price of $1,110,000.00.

Wildlife Conservation Board	**$1,110,000.00**
Other Project-related Costs:	10,000.00
TOTAL WCB Allocation	**$1,120,000.00**

It is estimated that an additional $10,000.00 will be needed to cover project-related expenses, including appraisal and DGS review costs.

FUNDING SOURCE
The proposed funding source for this project is the Habitat Conservation Fund, (Proposition 117), Section 2786(d)(1E) Inland Wetland Conservation Program, which allows for the protection of wetland habitat within the Central Valley and is consistent with the objectives of this project.

ENVIRONMENTAL COMPLIANCE AND STATE RECOMMENDATION
The acquisition has been reviewed for compliance with the California Environmental Quality Act (CEQA) requirements and is proposed as exempt under CEQA Guidelines Section 15313, Class 13, as an acquisition of land for wildlife conservation purposes, and Section 15325, Class 25, as a transfer of an ownership interest in land to preserve open space. Subject to authorization by the WCB, a Notice of Exemption will be filed with the State Clearinghouse. The Department of Fish and Game has reviewed this proposal and recommends it for approval.

STAFF RECOMMENDATION
Staff recommended that the Wildlife Conservation Board approve this project as proposed; allocate $1,120,000.00 from the Habitat Conservation Fund (Proposition 117), Section 2786(d) (1E) Inland Wetland Conservation Program, to cover the cost of acquisition and internal project-related expenses; authorize staff to enter into appropriate agreements necessary to accomplish this project; and authorize staff and the Department of Fish and Game to proceed substantially as planned.

Mr. Nelson introduced Mr. Kent Smith, Regional Manager, Region 2, and Mr. Andy Atkinson from the Department of Fish and Game; and Mr. Lauren Ward, the property owner, who were in the audience and available to answer questions.

Ms. Finn asked if we already have a conservation easement on this property. Mr. Donnelly explained that there is currently a conservation easement over the entire property, which is just a little over 400 acres. Mr. Donnelly reported that the Wildlife Conservation Board negotiated a Right of First Refusal when the conservation easement was put into place. Because of the importance of this particular property and the Department of Fish and Game programs up there, we felt it necessary to secure the opportunity to acquire this property should it ever come up for sale, so now we are exercising our First Right of Refusal for this project. Mr. McCamman asked Mr. Kent Smith if this property is going to be managed with the existing Upper Butte complex. Mr. Smith responded that this is correct. Mr. McCamman asked if Mr. Smith has estimated cost of how to incorporate this project into existing program. Mr. Andy Atkinson responded that it is $23,000.00. Mr. Smith commented that because of the challenging fiscal times we continue to work on new creative partnership ways to develop and implement management strategies on lands.

Mr. McCamman asked if there were any questions or comments about this item. There were none.

It was moved by Ms. Finn that the Wildlife Conservation Board approve this project as proposed; allocate $1,120,000.00 from the Habitat Conservation Fund (Proposition 117), Section 2786(d)(1E) Inland Wetland Conservation Program, to cover the cost of acquisition and internal project-related expenses; authorize staff to enter into appropriate agreements necessary to accomplish this project; and authorize staff and the Department of Fish and Game to proceed substantially as planned.

Motion carried.

22. Lower Yuba River, Excelsior, Phase I $3,216,440.00
Nevada and Yuba Counties

This proposal was to consider the acquisition by the Department of Fish and Game (DFG) under a cooperative project with The Trust for Public Land (TPL) and Caltrans to acquire approximately 527± acres of land for protection of deer and mountain lion habitat. The project will help maintain the natural biodiversity of the Lower Yuba River watershed and surrounding foothill areas, and expand public access and fishing opportunities to the Yuba River. Ms. Liz Yokoyama of the Wildlife Conservation Board briefly described the project and its location.

LOCATION
The subject property is located adjacent to the historic community of Smartsville, along the north side of the Highway 20 corridor in the eastern portion of Yuba County, and the western edge of Nevada County. The property is situated on the Lower Yuba River between Rose Bar and Englebright Dam and includes approximately two miles of river frontage, at the confluence of the Yuba River and Deer Creek. The site is bordered by Penn Valley, Grass Valley and Nevada City to the east and Marysville and Yuba City to the west. A historic Miner's Trail used during the Gold Rush remains on the site, providing a scenic hiking access through the property. The proposed acquisition is located within the DFG Lower Yuba River Conceptual Area Protection Plan (CAPP) and will provide habitat and recreational linkage between the DFG Daugherty Wildlife Area; University of California Foothill Research Station on the north; DFG Spenceville Wildlife Area; and the Beale Air Force Base on the south.

PROJECT DESCRIPTION
The project is being completed in two phases. The first phase before the Board for consideration is the fee acquisition of 527± acres of land. The second phase involves the acquisition of a conservation easement over 157± acres of adjoining land and will be completed in a future transaction between the

property owner and TPL. At this time, there are no plans for WCB to participate in this second transaction.

The subject property is well known for its scenic beauty and attractiveness to fisherman for its Chinook salmon and steelhead trout. It offers recreational boaters and hikers with panoramic views of the river, Rose Bar Bridge to the west, and the Englebright Dam on the east. The acquisition will also provide connections to over five miles of recreational areas previously deemed inaccessible. The site is representative of early California history and includes a traversable Miner's Trail that was constructed and used by miners during the California Gold Rush. Remnants of an historic Chinese wall and mining tunnel also remain intact on the property from California's gold mining past.

The subject property is rich in biodiversity, and includes grassland pastures, blue oak woodlands and riparian corridors containing riverine aquatic and associated riparian/wetland habitats. The property also supports wildlife that includes at least 29 reptiles and amphibian species, 57 bird species and 10 mammal species. Listed species found on the site include the Peregrine falcon, spring run Chinook salmon, Central Valley steelhead, California black rail, valley elderberry longhorn beetle, foothill yellow-legged frog, and the burrowing owl. The proposed acquisition will contribute to the regional conservation planning efforts carried out by various entities including the California Department of Parks and Recreation; the Sierra Nevada Conservancy; the Counties of Nevada, Yuba, Placer and Butte; Nevada County Land Trust; and the Placer Land Trust.

WCB PROGRAM

The proposed acquisition of this project is being made under the Land Acquisition Program at WCB. The Acquisition Program is administered pursuant to the WCB's original enabling legislation, the Wildlife Conservation Law of 1947 (Fish and Game Code Section 1300 et seq.) to acquire areas that can successfully sustain wildlife and provide for suitable recreation opportunities. Under this program acquisition activities are carried out in conjunction with the DFG, evaluating the biological values of property through development of a Conceptual Area Protection Plan (CAPP). The CAPP is then submitted to DFG's Regional Operations Committee (ROC) for review and approval and later transmitted to the WCB with a recommendation to fund.

MANAGEMENT OBJECTIVES AND NEEDS

The maintenance, conservation, security and caretaker services on the property will managed at no cost to the State, according to the terms of a Stewardship Agreement between the DFG and the Excelsior Foundation, a California nonprofit corporation, for a period of five years. At any time during the five year period and afterwards the DFG can take over management.

TERMS

The property has a fair market value of $3,700,000.00 based on an independent appraisal of the property, reviewed and approved by the Department of General Services (DGS). The property owner has agreed to sell the property at less than its approved appraised value, for $3,505,000.00. Once the property is acquired by TPL, it will immediately be conveyed to the DFG. The terms of the option agreement between TPL and seller require that escrow must be closed no later than December 31, 2010. Should the State grant funds not be available to close escrow as stipulated in the State's purchase agreement, TPL has agreed to fund the acquisition and hold the property until State funding is available to complete the acquisition by the DFG.

The terms and conditions of the proposed purchase agreement with TPL provide that staff of the WCB will review and approve all title documents, appraisals, preliminary title reports, documents for purchase and sale, escrow instructions and instruments of conveyance prior to disbursement of funds directly into the escrow account established for the acquisition.

PROJECT FUNDING

Proposed funding breakdown for the project is as follows:

Wildlife Conservation Board Grant	**$3,196,440.00**
California Department of Transportation	308,560.00
Landowner Donation	195,000.00
Total Purchase Price	$3,700,000.00
Other Project-related Costs:	20,000.00
TOTAL WCB Allocation	**$3,216,440.00**

It is estimated that an additional $20,000.00 will be needed for internal project-related expenses, including title and escrow fees and appraisal and transaction review costs by the Department of General Services.

FUNDING SOURCE

The proposed funding source for this project is the Habitat Conservation Fund (Proposition 117), Section 2786(b/c)(1E), which allows for the protection of habitat threatened and endangered species and preservation of wildlife values within a floodplain or flood corridor and is consistent with this project.

ENVIRONMENTAL COMPLIANCE AND STATE RECOMMENDATION

The project has been reviewed for compliance with the California Environmental Quality Act (CEQA) requirements and is proposed as exempt under CEQA Guidelines Section 15313, Class 13, as an acquisition of land for fish and wildlife conservation purposes, and under Section 15325, Class 25, as a transfer of an ownership interest in land to preserve open space and habitat.

Subject to approval by the Wildlife Conservation Board, a Notice of Exception will be filed with the State Clearinghouse.

STAFF RECOMMENDATION
Staff recommended that the Wildlife Conservation Board approve this project as proposed; allocate $3,216,440.00 from the Habitat Conservation Fund (Proposition 117), Section 2786(b/c)(1E), for the acquisition and project-related expenses; authorize staff to enter into appropriate agreements necessary to accomplish this project; and authorize staff and the Department of Fish and Game to proceed substantially as planned.

Ms. Yokoyama introduced Mr. Kent Smith, Regional Manager, Region 2, and Mr. Andy Atkinson from the Department of Fish and Game; Mr. Erik Vink, Senior Project Manager of The Trust for Public Land; and Mr. Brian Bisnett, the property owner, who were in the audience and available to answer questions.

Ms. Finn asked if the public access on the property, such as Miner's Trail, is marked or visible for the public. Ms. Yokoyama responded that there is access from the side, and there are plans to open it up to the public. Ms. Finn asked if it is open to the public right now. Ms. Yokoyama confirmed that the Miner's Trail is not open to the public now, but will be once we acquire this property. Mr. Kent Smith added that this is a very special piece of property as the Yuba River offers very limited public access, and this is an opportunity to create public access, as well as conservation opportunity, in an area that has historically had little or none to this reach of this river system. Mr. Smith also said that this project will provide public access to well managed system of fisheries opportunities in this particular part of Yuba River.

Ms. Finn said that the project is being completed in two phases: the first phase is 527 acres but the State is not involved in the second phase. Ms. Yokoyama confirmed that the State is not involved in the second phase of this project at this time. Ms. Finn asked if this project is only 527 acres. Ms. Yokoyama confirmed that this is correct. Ms. Finn asked if there is anything in the agreements that will make the State obligated to take on the second phase. Mr. Donnelly replied that there is no obligation for the State to be involved in the second phase of this project at this particular time. Ms. Finn asked with this property being transferred to the Department of Fish and Game, if the DFG has enough resources to cover it. Mr. Smith replied that we have at least partner support for five years, and after that we will see how it goes. Mr. Smith also added that the DFG has lots of management activities in this particular area, associated with the UC Davis property which is adjacent to this property. Mr. Donnelly pointed out that when you look at the map of this project, this property is in the heart of significant amount of the DFG's ownership.

Mr. McCamman acknowledged the presence of Ms. Teresa Schilling, Senator Wiggins representative, who joined the meeting at this point.

Mr. McCamman asked if there were any additional questions or comments about this item. There were none.

It was moved by Ms. Finn that the Wildlife Conservation Board approve this project as proposed; allocate $3,216,440.00 from the Habitat Conservation Fund (Proposition 117), Section 2786(b/c)(1E), for the acquisition and project-related expenses; authorize staff to enter into appropriate agreements necessary to accomplish this project; and authorize staff and the Department of Fish and Game to proceed substantially as planned.

Motion carried.

23. Bruin Ranch Phase I $4,515,000.00
Placer County

This proposal was to consider the allocation of a grant to Placer Land Trust for a cooperative project with the Department of Fish and Game (DFG), Caltrans and Placer County to acquire 1,773± acres of property to protect habitat for threatened and endangered species, including blue oak woodland habitat and approximately three miles of riparian corridor along the Bear River. Mr. Brian Gibson of the Wildlife Conservation Board briefly described the project and its location.

LOCATION
This privately owned property is located west of Highway 49, just west of the junction of Bell Road and Lone Star Road, adjacent to the Auburn Valley Golf and Country Club in Placer County. The property is within the DFG approved Spenceville Wildlife Area Conceptual Area Protection Plan (CAPP). The Wildlife Conservation Board (WCB) made an allocation of two grants in 2007 to Placer Land Trust (PLT) for the purposes of acquiring fee interest in approximately 320 acres and a conservation easement over approximately 313 acres of land south of the subject property.

PROJECT DESCRIPTION
Bruin Ranch is the largest parcel containing blue oak woodland in western Placer County, and includes over three miles of frontage on the Bear River. The property also includes a wide diversity of wildlife habitat, including potential habitat for the western pond turtle and its subspecies, the northwestern pond turtle, California red-legged frog and foothill yellow legged frog. In addition, protection of Bruin Ranch is a very high priority for Placer County, which is a funding partner, as part of its effort to implement the Placer County Habitat Conservation Plan (HCP) and the Natural Community Conservation Plan (NCCP) for the preservation habitat and open space corridors in the face of increasing development pressure. Protection of this property may also allow

the connection of a regional trail through previously protected land to Placer County's Hidden Falls Regional Park and Coon Creek, if appropriate.

WCB PROGRAM

The proposed grant for this project is being made under the Land Acquisition Program at WCB. The Acquisition Program is administered pursuant to the WCB's original enabling legislation, the Wildlife Conservation Law of 1947 (Fish and Game Section 1300, et seq.) to acquire areas that can successfully sustain wildlife and provide for suitable recreation opportunities. Under this program acquisition activities are carried out in conjunction with the DFG, evaluating the biological values of property through development of a Land Acquisition Evaluation (LAE)/Conceptual Area Protection Plan (CAPP). The LAE/CAPP is then submitted to DFG's Regional Operations Committee (ROC) for review and approval and later transmitted to the WCB with a recommendation to fund.

MANAGEMENT OBJECTIVES AND NEEDS

Under the terms of the grant agreement, PLT will manage the property for the benefit of wildlife habitat preservation, restoration and management, wildlife-oriented education and research, and for compatible public and private uses, all as may be consistent with wildlife habitat preservation and protection of sensitive biological resources.

TERMS

The property owner has agreed to sell the property for the Department of General Services (DGS) approved appraised fair market value of $9,500,000.00. The terms and conditions of the proposed grant to PLT provide that staff of the WCB will review and approve all title documents, appraisals, preliminary title reports, documents for purchase and sale, escrow instructions and instruments of conveyance prior to disbursement of funds directly into the escrow account established for the acquisition. In the event of breach of the grant terms the WCB can encumber the property with a conservation easement and seek reimbursement of funds. The property is encumbered by a Land Conservation Contract under the Williamson Act, and notification has been provided accordingly to the Department of Conservation.

PROJECT FUNDING

The proposed funding breakdown for the project is as follows:

Wildlife Conservation Board	**$4,500,000.00**
Placer County's Placer Legacy Program (Pending)	5,000,000.00
Caltrans EEMP	350,000.00
Total Purchase Price	$9,850,000.00
Other Project-related Costs:	15,000.00
TOTAL WCB Allocation	**$4,515,000.00**

It is estimated that an additional $15,000.00 will be needed to cover project-related expenses, including DGS review costs and escrow fees.

FUNDING SOURCE
The proposed funding source for this project is the California Clean Water, Clean Air, Safe Neighborhood Parks and Coastal Protection Fund (Proposition 40), Section 5096.650 that allows for protection of habitat for threatened and endangered species and protection of habitat corridors and is consistent with the objectives of this project.

ENVIRONMENTAL COMPLIANCE AND STATE RECOMMENDATION
The acquisition has been reviewed for compliance with the California Environmental Quality Act (CEQA) requirements and is proposed as exempt under CEQA Guidelines Section 15313, Class 13, as an acquisition of land for wildlife conservation purposes, and Section 15325, Class 25, as a transfer of an ownership interest in land to preserve open space. Subject to authorization by the WCB, a Notice of Exemption will be filed with the State Clearinghouse. The Department of Fish and game has reviewed this proposal and recommends it for approval.

STAFF RECOMMENDATION
Staff recommended that the Wildlife Conservation Board approve this project as proposed; allocate $4,515,000.00 from the California Clean Water, Clean Air, Safe Neighborhood Parks and Coastal Protection Fund (Proposition 40), Section 5096.650 to cover the grant amount and internal project-related expenses; authorize staff to enter into appropriate agreements necessary to accomplish this project; and authorize staff and the Department of Fish and Game to proceed substantially as planned.

Mr. Gibson introduced Mr. Dave Sutton, Director, Northern California/Nevada Program, Ms. Trish Strickland, Project Manager, both with the Trust for Public Land; and Mr. Jeff Darlington, Executive Director of the Placer Land Trust. All three were in the audience and available to answer questions.

Mr. Donnelly pointed out that a clarification needed to be made to this item in the agenda. Mr. Donnelly said that the appraised value is listed as $9,500,000.00, and in the Project Funding section the total purchase price is $9,850,000.00. Mr. Donnelly stated that the correct purchase price is $9,500,000.00. Mr. Donnelly said that as of the Board meeting, it was not certain whether or not the $350,000.00 from Caltrans would be available to help fund the project. Mr. Donnelly went on to say that in the event the Caltrans money would not be available the County was prepared to consider a grant of $5,000,000.00. Mr. Donnelly clarified that the agenda should show Placer County's Placer Legacy Program (Pending) as $4,650,000.00.

Mr. McCamman asked how Placer County's Placer Legacy Program (Funding) is to work. Mr. Gibson responded that the parties are working out the details,

such as a conservation easement language, and the Board of Supervisors will vote on funding for Bruin Ranch in early December. Mr. Gibson went on to say that the meetings between the Placer Land Trust, the Trust for Public Land, and the County were going very well and a "yes" vote from the Board of Supervisors was anticipated. Mr. McCamman asked what would happen if the County voted not to fund the project. Mr. Donnelly responded that in that case the Grantees would look for some another funding source and the project would likely come back to the WCB.

Ms. Finn asked who will own the property. Mr. Gibson replied that the Placer Land Trust will own the property. Mr. McCamman asked if this acquisition was consistent with the NCCP, and if it is a part of the acquisition purpose. Mr. Donnelly confirmed that this is correct.

Mr. Dave Sutton, Director, Northern California/Nevada Program of the Trust for Public Land, introduced himself before the Board and spoke in support of this item. Mr. Sutton said that this project is a component of a ten-year partnership underway with the Wildlife Conservation Board, Department of Fish and Game, Placerville Land Trust, Nevada County Land Trust, and the Trust for Public Land. Mr. Sutton stated that this project was part of a comprehensive effort to protect a 30 mile north and south swath of blue oak woodland habitat, as well as the river corridors that run 30 miles and encompass key Fish and Game investments in Spenceville. Mr. Sutton added that this project is a joint venture partnership with the Placer Land Trust, who will manage the property. Mr. Sutton said that this project is a critical investment for the Placer County conservation plan that is being develop, the NCCP. Mr. Sutton also stated that the Trust for Public Land has been working closely with each of the Board Members of Placer County Board of Supervisors, and the public session is going to be held on December 14 to approve the $5,000,000.00 funding. Mr. Sutton said that he was confident there would be a "yes" vote. Mr. Sutton thanked the Board for considering this project.

Mr. McCamman asked if there were any additional questions or comments about this item. There were none.

It was moved by Ms. Finn that the Wildlife Conservation Board approve this project as proposed; allocate $4,515,000.00 from the California Clean Water, Clean Air, Safe Neighborhood Parks and Coastal Protection Fund (Proposition 40), Section 5096.650 to cover the grant amount and internal project-related expenses; authorize staff to enter into appropriate agreements necessary to accomplish this project; and authorize staff and the Department of Fish and Game to proceed substantially as planned.

Motion carried.

Mr. McCamman announced that there was a speaker card for the item #21 (Upper Butte Basin Wildlife Area, Expansion 6, Butte County) that was overlooked. Mr. McCamman called the name, Ms. Susan Schor, but she was not in the audience at that time. Mr. McCamman apologized and proceeded forward with the meeting.

24. Oak Hills Ranch $2,296,000.00
Yolo County

Mr. Donnelly reported that a letter of support was received for this project from Mr. Graham Chisholm, Executive Director of Audubon California.

This proposal was to consider the allocation for a grant to the California Rangeland Trust (CRT) for a cooperative project to acquire a conservation easement over 3,316± acres of land for the protection of oak woodlands, riparian habitat, and conservation of critical wildlife migration corridors. Mr. Jon Wilcox of the Wildlife Conservation Board briefly described the projects and its location.

LOCATION

The property is located south of the community of Dunnigan and north of the town of Esparto in Yolo County. The property provides a wildlife migration corridor adjacent to the existing and currently negotiated conservation easements in the Hungry Hollow area. The property also provides linkage with the Cache Creek watershed open space areas to the west.

PROJECT DESCRIPTION

The property provides a high diversity of wildlife habitats that are intact and contiguous. The property is part of a much larger mosaic of intact oak woodland and oak savannah in the region and is adjacent and nearby to numerous large-acreage private ranches with similar habitat types and conditions. There are a multitude of natural vegetation communities present within the property, including California annual grassland, live oak woodland, blue oak woodland, valley oak savannah, chaparral, and riparian woodland, as well as salt water springs. Blue oaks are the dominant species and demonstrating an extremely significant regeneration rate. The live oak, blue oak and riparian woodland communities all exhibit trees of mixed age from seedlings to maturity.

Water on the property is provided by numerous springs, wells, and four seasonal creeks. The major drainages within the property provide important wildlife migration corridors and foraging, nesting, breeding and protection for a variety of birds, mammals, amphibians, and reptiles. There are also sixteen stock ponds on the property that provide water for seasonal grazing and abundant wildlife.

WCB PROGRAM

This project funding proposal was submitted to the Wildlife Conservation Board through its Oak Woodlands Conservation Program (Program). The project is reviewed and approved by WCB staff, and must be located within a county that has adopted an Oak Woodlands countywide conservation plan. The Program is designed to help local efforts achieve oak woodland protection. More importantly, this Program provides a mechanism to bring ranchers and conservationists together in a manner that allows both to achieve sustainable ranch and farming operations and healthy oak woodlands. The project meets the objectives of the Program by conserving some 4,275 contiguous acres of oak woodlands and allowing for the continued ranching and farming operations on the land.

MANAGEMENT OBJECTIVES AND NEEDS

The conservation easement and project area will be managed in accordance with local land use planning under the County of Yolo's Oak Woodland Conservation and Enhancement Program. As a condition of the grant, baseline studies will be completed and provided to the WCB prior to closing escrow. The CRT, which will hold title to the conservation easement, will monitor the property on an annual basis to ensure that conservation easement conditions are being met. Because this is an easement on private land, public access will be restricted.

TERMS

The property owners have agreed to sell a conservation easement to the CRT for the Department of General Services' (DGS) approved appraised fair market value of $2,286,000.00. The terms and conditions of the proposed grant to the CRT provide that staff of the WCB will review and approve all title documents, appraisals, preliminary title reports, documents for purchase and sale, escrow instructions and instruments of conveyance prior to disbursement of funds directly into the escrow account established for the acquisition. In the event of breach of the grant terms the WCB can request the conveyance of the conservation easement to the State and/or seek reimbursement of funds.

PROJECT FUNDING

The WCB proposes to make a grant to the CRT for the full amount of the purchase price:

Wildlife Conservation Board Grant	**$2,286,000.00**
Other Project-related Costs:	10,000.00
TOTAL WCB Allocation	**$2,296,000.00**

It is estimated that an additional $10,000.00 will be needed to cover internal project-related expenses, including DGS review costs.

FUNDING SOURCE

The proposed funding source for this project is the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Fund of 2006, (Proposition 84), Section 75055(d)(2) and provides funding to ensure continued wildlife, water quality, watershed and open space benefits to the State of California for oak woodlands preservation and is consistent with the objectives of this project.

ENVIRONMENTAL COMPLIANCE AND STATE RECOMMENDATION

The acquisition has been reviewed for compliance with the California Environmental Quality Act (CEQA) requirements and is proposed as exempt under CEQA Guidelines Section 15313, Class 13, as an acquisition of land for wildlife conservation purposes, and Section 15325, Class 25, as a transfer of an ownership interest in land to preserve open space. Subject to authorization by the WCB, a Notice of Exemption will be filed with the State Clearinghouse. The project has been reviewed and approved for funding by WCB staff under the WCB's Oak Woodlands Conservation Program.

STAFF RECOMMENDATION

Staff recommended that the Wildlife Conservation Board approve this project as proposed; allocate $2,296,000.00 from the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Fund of 2006 (Proposition 84), Section 75055(d)(2) for the grant and internal project-related expenses; authorize staff to enter into appropriate agreements necessary to accomplish this project; and authorize staff and the Department of Fish and Game to proceed substantially as planned.

Mr. McCamman commented that in the agenda he does not see endowment-related language in this item. Mr. Wilcox responded that it will be worked out with the property owner. Ms. Finn asked if the acreage is 3,300 acres or 4,300 acres. Mr. Wilcox replied that it is 3,316 acres. Ms. Finn pointed out that it says in the agenda, under "WCB Program" section, "…some 4,275 contiguous acres of oak woodlands…" and asked if it is in addition to the 3,316 acres. Mr. Wilcox confirmed that the right size is 3,316 acres and apologized for this mistake in the agenda. Mr. McCamman expressed his concern about the monitoring issue and asked if we get monitoring baseline report before the transaction closes. Mr. Wilcox confirmed that this is correct and that there is an annual monitoring to occur that is not funded yet, but is being worked out between the Rangeland Trust and the property owner.

Mr. McCamman asked if there were any additional questions or comments about this item. There were none.

It was moved by Ms. Finn that the Wildlife Conservation Board approve this project as proposed; allocate $2,296,000.00 from the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal

Protection Fund of 2006 (Proposition 84), Section 75055(d)(2) for the grant and internal project-related expenses; authorize staff to enter into appropriate agreements necessary to accomplish this project; and authorize staff and the Department of Fish and Game to proceed substantially as planned.

Motion carried.

25. San Joaquin River Parkway, Jensen River Ranch Phase II Construction
Fresno County — $1,982,513.00

Mr. Donnelly explained that the San Joaquin River Conservancy is the State Conservancy, and their funding is within the Wildlife Conservation Board's (WCB) appropriations. As the Conservancy recommends a project to move forward, the WCB acts to fund those transactions and approve the project as well.

This proposal was to consider the allocation for an interagency agreement with the Department of Water Resources for a cooperative project with the San Joaquin River Conservancy (SJRC) to restore wetland and riparian habitat and construct public access trails on the San Joaquin River Parkway (Parkway) just east of Highway 41 in the City of Fresno, Fresno County. Mr. Scott McFarlin briefly described the project and its location.

LOCATION
The Parkway is defined in State Legislation as approximately 5,900 acres within a twenty-two mile long stretch between Friant Dam and State Route 99 on the San Joaquin River in Fresno and Madera Counties. The SJRC was created in 1992 to preserve and enhance the San Joaquin River's extraordinary biological diversity, protect its valued cultural and natural resources and provide educational and recreational opportunities to the local communities. The SJRC's mission includes both public access and habitat restoration within the Parkway.

The 167± acre Jensen River Ranch, acquired by the WCB in 1997, is located on the Parkway near the junction of Highway 41, in the City of Fresno, in Fresno County. Phase I was restored by the DWR in the fall of 2007 and consisted of the 100± acres south of the D/K storm water channel, which roughly divides the property into north and south halves. Planning and design for the restoration of the remainder of the property lying north of the D/K storm water channel, which is the property to be restored with this proposal, was approved by the WCB on May 22, 2008.

PROJECT DESCRIPTION

Completing the Jensen River Ranch Project is the SJRC and the Interagency Project Development Committee's (IPDC) highest priority restoration project. The IPDC is an independent committee and serves to provide recommendations to the San Joaquin River Conservancy staff and board on priorities for both land acquisitions and restoration or public access projects. The recommended action will authorize funding for DWR to construct the remaining infrastructure on the portion of the Jensen River Ranch site north of the water retention channel, identified as Phase 2. The scope of work includes:

1. Habitat enhancement infrastructure, which includes demolition of pasture irrigation pipes; installing irrigation to the planting cells; construction of a gravel maintenance road on the perimeter; grading swales and depressions for runoff to create wetlands; and installing barbed wire fencing to allow for future prescribed grazing for weed management;

2. Improvements to public access trail within the Phase 1 area, which will improve performance and reduce maintenance by paving the surface of the Americans with Disabilities Act-compliant trail and improving trail drainage;

3. Recreation and public access infrastructure, which includes the construction of split rail fencing to demark the hiking trail (co-located on the maintenance road) and a trail ascending the bluff to connect the northern trail loop with the Lewis S. Eaton multiple purpose trail above. The City of Fresno, which maintains existing public access facilities on the site and on adjacent Parkway lands, currently has a moratorium on building new trails and parks until new local funding is identified; therefore the recreation and public access components will not be included in the bid package unless additional resources are secured; and

4. Construction oversight and environmental permitting.

Construction is planned to begin in late summer or early fall of 2011.

WCB PROGRAM

The WCB's Habitat Enhancement and Restoration Program and Public Access Program provide the basis for WCB's ability to restore habitat and provide public access State-wide. In addition, funds were appropriated to the WCB from the California Clean Water, Clean Air, Safe Neighborhood Parks and Coastal Protection Fund (Proposition 40) to be provided to the SJRC for the acquisition, development, rehabilitation, restoration and protection of land and water resources.

MANAGEMENT OBJECTIVES AND NEEDS

The 167± acre Jensen River Ranch is owned by the San Joaquin River Conservancy. The SJRC, as the landowner, will be responsible for

managing the property after the project is complete, as it does at present. For all of its properties, the SJRC maintains fences and gates, maintains grazing and other leases, removes illegal dumping and nuisances, addresses citizen complaints, coordinates with the local mosquito abatement districts, performs fire prevention activities, and maintains access licenses with stewardship and educational groups. The proposed project will not significantly increase current management demands.

The San Joaquin River Parkway and Conservation Trust has also been a partner in the overall Jensen Ranch project, and received a River Parkways Grant from the California Natural Resources Agency to plant, irrigate, and maintain the habitat restoration component of Phase 1. The River Parkway Trust's work on the grant is on-going. Funding for habitat planting and maintenance is expected to be brought to the San Joaquin River Conservancy Board in the near future. Work to be funded will include weed eradication, planting native trees and shrubs, and managing irrigation and weeds for at least three years of plant establishment.

Existing recreational access has, and will continue to, be managed by the City of Fresno. However, the City of Fresno enacted a moratorium on extending trails and building new parks until new local funding can be identified. As a result, the recreational components for Phase II are budgeted but will not be constructed if the moratorium continues. Should funds be identified, the new public access facilities will be constructed, and the City of Fresno will maintain the new facilities consistent with their current responsibilities.

PROJECT FUNDING

The proposed funding breakdown for the project is as follows:

Wildlife Conservation Board	**$1,982,000.00**
Other Project-related Costs:	513.00
TOTAL WCB Allocation	**$1,982,513.00**

Project costs funded by the WCB will include DWR's construction oversight and environmental permitting and compliance; site preparation; earthmoving; gravel for access road; irrigation; trail construction; trail renovation within the Phase I area; and fencing. In addition to the costs listed above, an additional $513.00 will be required for Department of General Services' review costs, bringing the total allocation necessary for this project to $1,982,513.00.

FUNDING SOURCE

The proposed funding source for this project is the California Clean Water, Clean Air, Safe Neighborhood Parks, and Coastal Protection Fund (Proposition 40), Section 5096.650(b)(5). This funding provides for the acquisition, development, rehabilitation, restoration and protection of land and water resources consistent with the SJRC's mission and the Parkway Master Plan.

ENVIRONMENTAL COMPLIANCE AND STATE RECOMMENDATION
As lead agency, the SJRC filed a Mitigated Negative Declaration pursuant to the provisions of the California Environmental Quality Act (CEQA) in March 2002. Staff considered the Mitigated Negative Declaration prepared by SJRC and has prepared written findings documenting WCB's compliance with CEQA. Subject to approval by the WCB, the appropriate Notice of Determination will be filed with the State Clearinghouse.

STAFF RECOMMENDATION
Staff recommended that the Wildlife Conservation Board adopt the written findings and approve this project as proposed; allocate $1,982,513.00 from the California Clean Water, Clean Air, Safe Neighborhood Parks and Coastal Protection Fund (Proposition 40), Section 5096.650(b)(5); authorize staff to enter into appropriate agreements necessary to accomplish this project; and authorize staff to proceed substantially as planned.

Mr. Scott McFarlin introduced Ms. Melinda Marks, Executive Officer of the San Joaquin River Conservancy, who was in the audience and available to answer questions.

Ms. Finn had a question regarding the issue with the City of Fresno providing public access and asked if they are going to provide it or not. Mr. McFarlin replied that right now it does not look like the City will be able to fund this part of the project, and the Conservancy indicated that they are trying to get funding some other way. Mr. McCamman asked, with this property being public, would the public be able to access it. Mr. McFarlin responded that the trails will be closed off to the public if the City can not manage it, but the restoration project will still go forward in that area. Ms. Finn asked if the Conservancy just turned the property over to the City. Mr. McFarlin replied that the Conservancy manages the site overall with the City of Fresno providing maintenance of the trails. Mr. McCamman commented that it would be ideal to integrate this property into the adjacent park. Mr. Donnelly commented that the Conservancy itself is made up of Madera and Fresno Counties and a number of other organizations locally, including the Department of Fish and Game, and ownership pattern along the river is mosaic of different types of public ownership, and this has been an issue of ongoing struggle for the Conservancy, as well as for other public entities that own the properties along the San Joaquin River. Ms. Melinda Marks spoke before the Board in support of this project. Ms. Marks explained that the Phase I of this site has an existing trail and the City of Fresno operates that. Regarding the Phase II, we need to figure out how we can make sure that the City has adequate funding to manage it. Ms. Marks said that the Phase II will provide access roads that are necessarily to build a restoration component, and those roads will become trails at the point when we know that we have that adequate funding to proceed.

Mr. McCamman asked if the Conservancy has a master plan for this whole stretch of the river. Ms. Marks confirmed that this is correct. Mr. McCamman asked if the master plan is available on the Conservancy's website. Ms. Marks responded that it is available on their website and also the San Joaquin Parkway Trust's, and mentioned that the plan needs to be updated. Ms. Marks added that there will be a request before the Board at its February 2011 meeting to allocate funds for a Parkway Master Plan update. Mr. McCamman added that there are some hatchery expansion issues associated with this project. Ms. Marks commented that the Conservancy is working closely with the hatchery on this project to resolve those issues.

Ms. Finn asked if we are only paying $500.00 to the Department of General Services (DGS). Mr. Donnelly replied that this is the cost of a contract review, and it used to be $176.00 but the DGS raised their fees.

Mr. McCamman asked if there were any questions or comments about this item. There were none.

It was moved by Ms. Finn that the Wildlife Conservation Board adopt the written findings and approve this project as proposed; allocate $1,982,513.00 from the California Clean Water, Clean Air, Safe Neighborhood Parks and Coastal Protection Fund (Proposition 40), Section 5096.650(b)(5); authorize staff to enter into appropriate agreements necessary to accomplish this project; and authorize staff to proceed substantially as planned.

Motion carried.

26. Los Vaqueros Ranch Conservation Easement, Phase II — $1,210,000.00
Monterey County

This proposal was to consider the allocation for a grant to The Nature Conservancy (TNC) to assist with its acquisition of a conservation easement over 800± acres of property to protect critical steelhead trout habitat as well as habitat for sensitive wildlife species. Ms. Teri Muzik of the Wildlife Conservation Board briefly described the project and its location.

LOCATION

The Los Vaqueros Ranch (Ranch) totals 2,137± acres and is located in central Monterey County in the Coast Range Mountains on the west side of the Salinas Valley, approximately 7 miles southwest of the town of Greenfield. The property includes portion of the Arroyo Seco River and its riparian corridor as well as portions of Sweetwater Creek and Vaqueros Creek.

Phase 1 of the project was approved on November 19, 2009, by the Wildlife Conservation Board (WCB). The WCB approved a subgrant of federal funds to assist TNC with the acquisition of a conservation easement over 1,337± acres of the Ranch. Phase 1 covered the western portion of the Ranch and the proposed project (Phase 2) will allow TNC to acquire a conservation easement over the eastern 800± acres of the Ranch.

The majority of the land south and west of the Ranch is public land owned by the Federal Government. Immediately south of the Ranch is the Ventana Wilderness area, administered by the Los Padres National Forest as part of the United States Forest Service. The Ranch borders large tracts of privately owned land on its eastern and northern borders. The Department of Fish and Game has developed the Arroyo Seco River Conceptual Area Protection Plan (CAPP) and the Ranch is located within that CAPP.

PROJECT DESCRIPTION

DFG has identified the Arroyo Seco River, in Monterey County, as a conservation priority. Protection of the river and its surrounding properties would create a terrestrial and hydrologic connection between the northern boundary of the Los Padres National Forest and the Arroyo Seco River basin and would help protect the last remaining known southern steelhead trout run in the Salinas River basin. Extensive riparian habitat will provide neotropical migratory songbird and waterfowl habitat and several sensitive wildlife species including the California red-legged frog, a federally threatened species, foothill yellow-legged frog, a federal and state species of concern, the western pond turtle and several intact populations of native fish are found on site.

WCB PROGRAM

The proposed grant for this project is being made under the Land Acquisition Program at WCB. The Acquisition Program is administered pursuant to the WCB's original enabling legislation, the Wildlife Conservation Law of 1947 (Fish and Game Code Section 1300 et seq.) to acquire areas that can successfully sustain wildlife and provide for suitable recreational opportunities. Under this program, acquisition activities are carried out in conjunction with the DFG, evaluating the biological values of property through either development of a Land Acquisition Evaluation (LAE) or a CAPP. The LAE/CAPP is then submitted to the DFG Regional Operation Committee (ROC) for review and approval and later transmitted to the WCB with a recommendation to fund.

MANAGEMENT OBJECTIVES AND NEEDS

TNC has owned and managed lands for biodiversity conservation purposes for over 50 years. The policies and procedures adopted by the TNC's Board of Governors require that when TNC acquires any legal interests in conservation land that it intends to hold, funds must be set aside by the date of closing for the perpetual management or stewardship of that interest.

The WCB grant agreement requires the grantee prepare, and WCB approve, a baseline conditions report for the property being protected. The WCB grant agreement also requires annual monitoring by TNC and access to the property by WCB/DFG staff not less than once every three years to conduct monitoring. TNC proposes to manage the conservation easement to maintain and restore habitat for breeding populations of red-legged frogs, for steelhead passage and for potential steelhead spawning and rearing. Conservation of aquatic and riparian habitat within the Arroyo Seco watershed will help maintain red-legged frog and steelhead presence within the greater Salinas drainage, and may provide a starting point for future restoration of historic steelhead runs in other Salinas tributaries. Because this is an easement on private land, public access will be restricted.

TERMS

The Phase 2 conservation easement was appraised for $1,465,000.00 and the appraisal has been reviewed and approved by the Department of General Services (DGS). The property owner has agreed to sell the conservation easement at a bargain sale price of $1,200,000.00. The difference of $265,000.00 represents a donation by the landowner. The terms and conditions of the proposed grant to TNC provide that staff of the WCB will review and approve all documents pertaining to the acquisition of the conservation easement, including, without limitation, appraisals, preliminary title reports and items referenced therein, options, agreements for purchase and sale, escrow instructions, and instruments of conveyance prior to disbursement of funds directly into the escrow account established for the acquisition.

PROJECT FUNDING

The WCB proposes to make a grant to TNC for the full amount of the purchase price:

WCB Grant	**$1,200,000.00**
Landowner Donation	265,000.00
Total Purchase Price	$1,465,000.00
Other Project-related Costs:	10,000.00
TOTAL WCB Allocation	**$1,210,000.00**

It is estimated that $10,000.00 will be needed to cover internal project-related costs including the appraisal review costs by the DGS.

FUNDING SOURCE

The proposed funding source for this project is the Habitat Conservation Fund, (Proposition 117), Section 2786 (b/c)(1E), that allows for the acquisition of habitat to protect rare, threatened and endangered or fully protected species, provide corridors linking separate habitat areas and protect significant natural lands and is consistent with the purposes of this project.

ENVIRONMENTAL COMPLIANCE AND STATE RECOMMENDATION
The acquisition has been reviewed for compliance with the California Environmental Quality Act (CEQA) requirements and is proposed as exempt under CEQA Guidelines Section 15313, Class 13, as the acquisition of land for wildlife conservation purposes, and Section 15325, Class 25, as a transfer of ownership in land to preserve open space. Subject to authorization by the WCB, a Notice of Exemption will be filed with the State Clearinghouse. The DFG has reviewed the project and recommends approval of the grant.

STAFF RECOMMENDATION
Staff recommended that the Wildlife Conservation Board approve this project as proposed; allocate $1,210,000.00 from the Habitat Conservation Fund (Proposition 117), Section 2786 (b/c)(1E) to cover the grant amount and internal project-related expenses; authorize staff to enter into appropriate agreements necessary to accomplish this project; and authorize staff and the Department of Fish and Game to proceed substantially as planned.

Ms. Muzik introduced Ms. Chris Fisher from The Nature Conservancy, and Ms. Lynne Gould, the landowner, who were in the audience and available to answer questions.

Ms. Finn asked if there are funds set aside for management of this easement. Ms. Muzik confirmed that this is correct. Ms. Finn asked to confirm the purchase price. Ms. Muzik responded that the purchase price is $1,200,000.00 and explained that $1,465,000.00 was the approved appraised value, but the landowner agreed to sell the property at a lower price of $1,200,000.00. Ms. Finn pointed out that it says in the agenda that we were proposing to make a grant for the full amount of purchase price of $1,465,000.00. Mr. Donnelly commented that this includes the landowner donation, which should had been backed out of the $1,465,000.00. Mr. Donnelly explained that the property has appraised value of $1,465,000.00. The purchase price is $1,200,000.00, which recognizes $265,000.00 donation on behalf of the landowner.

Mr. McCamman asked if there are agricultural/grazing operations on the property. Ms. Muzik confirmed that there are agricultural operations on the property, and they will continue.

Mr. McCamman asked if there were any questions or comments about this item. There were none.

It was moved by Ms. Finn that the Wildlife Conservation Board approve this project as proposed; allocate $1,210,000.00 from the Habitat Conservation Fund (Proposition 117), Section 2786 (b/c)(1E) to cover the grant amount and internal project-related expenses; authorize staff to enter into appropriate agreements necessary to accomplish this project; and authorize staff and the Department of Fish and Game to proceed substantially as planned.

Motion carried.

27. Santa Clara River Watershed, Totlcom $2,298,500.00
Ventura County

Mr. Donnelly reported that several letters of support were received for this project from the following people: Fran Pavley, Senator, 23rd Senate District; Julia Brownley, Assemblywoman, 41st District; Dr. Tom Dudley, Research Associate, Marine Science Institute, University of California, Santa Barbara (and family farmer in the Santa Clara Valley); Phillip W. Rundel, Distinguished Professor, University of California, Los Angeles; Barbara M. Harison, Executive Director, Ventura Hillsides Conservancy; Kirsten James, Water Quality Director, Heal the Bay; Ron Bottorff, Chairman, Friends of the Santa Clara River.

This proposal was to consider the allocation of a grant to The Nature Conservancy (TNC), the acceptance of a Recovery Land Acquisition Grant from the U.S. Fish and Wildlife Service, and the authorization to enter into an Agreement to Subgrant to TNC for a cooperative project with the State Coastal Conservancy, Santa Clara River Trustee Council and the Department of Fish and Game (DFG). The project consists of the acquisition of 123± acres of land for the protection of threatened and endangered species and habitat corridors. Mr. Bill Gallup of the Wildlife Conservation Board briefly described the project and its location.

LOCATION
The subject property is a privately owned agricultural parcel located within the floodplain of the Santa Clara River east of Harbor Drive and west of Victoria Avenue, just southerly of the city limits of the city of Ventura. The property abuts the Santa Clara River and is within the 100-year flood plain area. The Santa Clara River is one of the largest watersheds in Southern California without a major dam; as such, it is one of the priority watersheds for protection and restoration. TNC has acquired the property adjacent to the subject property and intends to complete two more acquisitions nearby, thus protecting total 350± acres in the vicinity. All of the properties within the immediate area are in agricultural use.

PROJECT DESCRIPTION
The subject property has been farmed over the past seventy five years and is improved with an agricultural well with diesel engine pump and miscellaneous temporary farm structures to assist during the harvest season. The project will allow for the protection of riparian and floodplain habitat along the Santa Clara River, one of the most intact river systems remaining in southern California. Southwestern willow flycatcher, least Bell's vireo and the southern California steelhead; all federally endangered species, are the primary targets of the project. However, other listed and candidate species are expected to benefit from this project, including the arroyo toad and the California red-legged frog. This acquisition is part of a larger effort to project and restore the river and

floodplain ecosystem, which supports exceptional biodiversity. The goal of the larger effort is to protect the river and floodplain from channelization, urban development, bank stabilization and other actions that alter the river and floodplain processes.

WCB PROGRAM

The proposed grant for this project is being made under the Land Acquisition Program at WCB. The Acquisition Program is administered pursuant to the WCB's original enabling legislation, the Wildlife Conservation Law of 1947 (Fish and Game Code Section 1300 et seq.) to acquire areas that can successfully sustain wildlife and provide for suitable recreation opportunities. Under this program acquisition activities are carried out in conjunction with the DFG, evaluating the biological values of property through development of a Land Acquisition Evaluation (LAE)/Conceptual Area Protection Plan (CAPP). The LAE/CAPP is then submitted to DFG's Regional Operations Committee (ROC) for review and approval and later transmitted to the WCB with a recommendation to fund.

MANAGEMENT OBJECTIVES AND NEEDS

Under the terms of the grant, TNC will manage the property for the benefit of threatened and endangered species. The agricultural use will continue under specific seasonal leases managed by TNC. Monitoring for the agricultural lease will be conducted periodically by TNC and the lease will be modified to achieve the maximum protection of the resource. If appropriate for the property, levees may be removed allowing more naturally occurring floodplain and creating a wider riverine and riparian habitat area.

TERMS

The property owner has agreed to sell the property in fee to TNC below the Department of General Services' (DGS) approved appraised fair market value of $8,800,000.00. The negotiated purchase price is $8,577,000.00 The terms and conditions of the proposed grant to TNC provides that staff of WCB will review and approve all title documents, appraisals, preliminary title reports, documents for purchase and sale, escrow instructions and instruments of conveyance prior to disbursement of funds directly into the escrow account established for the acquisition. In the event of breach of the grant terms the WCB can encumber the property with a conservation easement and seek reimbursement of funds.

PROJECT FUNDING

Wildlife Conservation Board	**$2,288,500.00**
State Coastal Conservancy	2,288,500.00
Santa Clara River Trustee Council	3,000,000.00
US Fish and Wildlife Service – Sec. 6 Grant	1,000,000.00
Total Purchase Price:	$8,577,000.00

Other Project-related Costs:	10,000.00
TOTALWCB Allocation	**$2,298,500.00**

It is estimated that an additional $10,000.00 will be needed to cover project-related costs, including the Department of General Services review costs.

FUNDING SOURCE
The proposed funding source for this project is the California Clean Water, Clean Air, Safe Neighborhood Parks and Coastal Protection Act of 2002 (Proposition 40), Section 5096.650, that provides funding for grants to acquire property for habitat protection for endangered and threatened species and is consistent with the objectives of this project.

ENVIRONMENTAL COMPLIANCE AND STATE RECOMMENDATION
The acquisition has been reviewed for compliance with the California Environmental Quality Act (CEQA) requirements and is proposed as exempt under CEQA Guidelines Section 15313, Class 13, as an acquisition of land for wildlife conservation purposes, and Section 15325, Class 25, as a transfer of an ownership interest in land to preserve open space. Subject to authorization by the WCB, a Notice of Exemption will be filed with the State Clearinghouse. The project has been reviewed and approved for funding by WCB staff.

STAFF RECOMMENDATION
Staff recommended that the Wildlife Conservation Board approve this project as proposed; allocate $2,298,500.00 from the California Clean Water, Clean Air, Safe Neighborhood Parks and Coastal Protection Fund (Proposition 40), Section 5096.650 for the grant and internal project-related expenses; authorize staff to enter into appropriate agreements necessary to accomplish this project; and authorize staff and the Department of Fish and Game to proceed substantially as planned.

Mr. Gallup introduced Mr. EJ Remson, Program Manager from The Nature Conservancy, who was in the audience and available to answer questions.

Mr. McCamman asked about extended agricultural use of this property. Mr. Gallup commented that he was standing on the levee that is built between the farm and the river, and that a levee keeps the water out of the farm land and those levees are going to be removed ultimately to expand the habitat. Mr. McCamman commented that it is indicated in staff report that there is a lot of agricultural uses going on on this property. Mr. EJ Remson introduced himself before the Board and responded that TNC is acquiring several properties in this area to convert them into riparian or restoration activity. Mr. Remson said that TNC intends to keep this in agriculture until they have enough resources to do the restoration. Mr. McCamman asked if it would affect the operation of the Olivas Park. Mr. Remson replied that it would not because there is a natural bench which provides excellent protection.

Ms. Finn asked if we are acquiring a clean site. Mr. Remson responded that Phase I was conducted on this project, and there was no further action required, so the property we are acquiring is clean. Mr. Remson also added that, because of a diesel pump there, TNC will monitor the property.

Mr. McCamman pointed out the importance of these kinds of acquisitions where WCB has multiple partners, saying that we are not contributing all the funding but providing a portion with a partnership, which is a most effective way to leverage our funds.

Mr. Donnelly asked to make an addition to the motion, which was to include the acceptance of federal Section 6 grants as well as the authorization to subgrant those grants to The Nature Conservancy. Mr. McCamman and Ms. Finn agreed to make this addition.

Ms. Finn asked if the Coastal Conservancy took action on this project. Mr. Gallup confirmed that it had.

Mr. McCamman asked if there were any comments or questions about this item. There was none.

It was moved by Ms. Finn that that the Wildlife Conservation Board approve the project as proposed; accept federal Section 6 grants and authorize to subgrant those funds to The Nature Conservancy; allocate $2,298,500.00 from the California Clean Water, Clean Air, Safe Neighborhood Parks and Coastal Protection Fund (Proposition 40), Section 5096.650 for the grant and internal project-related expenses; authorize staff to enter into appropriate agreements necessary to accomplish this project; and authorize staff and the Department of Fish and Game to proceed substantially as planned.

Motion carried.

28. Malibu Lagoon State Beach $4,000,000.00
Lagoon Restoration, Construction Phase
Los Angeles County

Mr. Donnelly reported that there has been significant support for this project from different organizations such as Los Angeles Audubon, Sierra Club, Santa Monica Bay Keeper, Malibu Surfing Association, Santa Monica Bay Restoration Commission, National Park Service, United States Environmental Protection Agency, Los Angeles Regional Water Quality Control Board, and many others. Mr. Donnelly also reported that we received two opposition letters for this project, one from Ms. Marcia Hanscom, Director, Wetlands Defense Fund, and one from Ms. Alessandra DeClario, Ph.D., Malibu, CA.

This proposal was to consider the allocation for a grant to the California Department of Parks and Recreation (DPR) to improve water circulation, remove non-native vegetation, restore native vegetation, and provide additional educational and public use facilities in Malibu Lagoon State Beach. Mr. Peter Perrine of the Wildlife Conservation Board briefly described the project and its location.

LOCATION

The project is located in Malibu Lagoon State Beach at Pacific Coast Highway and Cross Creek Road in Los Angeles County. The lagoon is a 31-acre shallow water embayment and coastal wetland complex occurring at the terminus of the Malibu Creek Watershed, the second largest watershed draining into Santa Monica Bay. The lagoon empties into the Pacific Ocean at world famous Malibu Surfrider Beach, renowned as a surfing and recreational destination, hosting approximately 1.5 million visitors every year.

PROJECT DESCRIPTION

The lagoon has undergone many changes in its recent history. In the 1950's and 60's it was used as a dump site for fill material by the California Department of Transportation (Caltrans) and others. By the late 1970's the site was completely filled and housed two baseball fields. The lagoon has also been greatly diminished by urban development along the coast. In addition, urbanization upstream in the Malibu Creek Watershed has increased the volume of water transported into the lagoon and significantly diminished the quality of the water.

In 1983, DPR initiated restoration work on the lagoon, by excavating fill to create three channels with sloping mudflats to reintroduce tidal flow. The channels were seeded with salt marsh plants and series of boardwalks were created to allow access by the public. Over time, sediments were deposited, creating pickleweed marshes and upland habitat. In 1996 Caltrans funded a successful restoration program to mitigate impacts incurred during the Malibu Lagoon Bridge Replacement Project. Specific restoration measures, coordinated by the Resource Conservation District of the Santa Monica Mountains (RCDSMM) and DPR, included a successful tidewater goby habitat enhancement project and the revegetation of areas disturbed by construction activities. However, the problems of Malibu Creek and Malibu Lagoon and its adjacent coastal waters continue. The lagoon is currently listed as impaired under the Clean Water Act Section 303(d) for benthic impacts, pathogens, nutrients, eutrophication, swimming restrictions, and shellfish harvesting. Studies have indicated high pathogen concentrations in the lower Malibu Creek, the lagoon and surf zone that could potentially impact the health of swimmers and surfers. The current configuration of channels causes poor circulation, eutrophication, and low dissolved oxygen levels in the lagoon. Large algal blooms erupt in the dry season, further depleting oxygen and endangering fish and other aquatic organisms. In the summer when direct

flows to the ocean are impeded by the build up of sand bars, circulation is further reduced, thus worsening the problem.

The purpose of this project is to enhance existing water quality conditions and restore and enhance habitat areas that have diminished functions or are in a currently degraded state. Restoration activities have been designed to improve water circulation, increase tidal inundation, improve and expand critical habitat for tidewater goby and steelhead trout, remove non-native and restore native vegetation, minimize human and pet disturbance while maximizing educational and recreational use of the site. The goal of the project is to create a natural self sustaining system that minimizes future maintenance requirements.

Restoration activities will encompass two primary components. First, salt marsh enhancement in the western complex will increase tidal flushing, improve water circulation, increase holding capacity and reduce predator encroachment. Second, east lagoon restoration will restore typical salt marsh hydrology and enhance habitat for sensitive bird species. Construction activities at the lagoon will primarily involve earthwork coupled with non-native species removal and enhancement and creation of native/wetland vegetation.

In addition, the project will enhance the visitor experience through improvements to access and interpretive amenities. The existing trail along the perimeter of the western lagoon will be enhanced through the addition of five new interpretive nodes, with interpretive signage that will provide information on intertidal habitat and kelp forest ecology, watershed processes, sensitive bird and aquatic species, tidal inundation and seasonal water level fluctuations, as well as the cultural history of the site. Interpretive signage will also be installed along the trail, which will enable passive interaction without disturbing the wildlife using the lagoon.

WCB PROGRAM

This project is funded through the Habitat Enhancement and Restoration Program, which allows for the restoration of native fisheries restoration, restoration of tidal or freshwater wetlands and upland areas including coastal scrub, grasslands, oak woodlands, and threatened and endangered species habitats in the State. This authority is pursuant to the Board's original enabling legislation, The Wildlife Conservation Law of 1947 (Fish and Game Code Section 1300 et seq).

MANAGEMENT OBJECTIVES AND NEEDS

The grantee has agreed to manage and maintain the facilities for 25 years, pursuant to the terms and conditions of the grant.

PROJECT FUNDING

The proposed funding breakdown for the project is as follows:

Wildlife Conservation Board	**$4,000,000.00**
State Water Resources Control Board	2,495,858.00
State Coastal Conservancy	50,000.00
Los Angeles County	1,129,808.00
TOTAL	**$7,675,666.00**

Project costs will be for site preparation, grading, erosion control, planting, parking lot rehabilitation, interpretive features, monitoring and project management.

FUNDING SOURCE
The proposed funding source for this project is the Security, Clean Drinking Water, Coastal and Beach Protection Fund of 2002 (Proposition 50), Section 79572(a), which allows for the restoration of coastal wetlands in southern California, and is consistent with the objectives of this project.

ENVIRONMENTAL COMPLIANCE AND STATE RECOMMENDATION
The DFG has reviewed this proposal and recommends it for funding by the WCB. The Department of Parks and Recreation, as lead agency, prepared a Final Environmental Impact Report (EIR) and Notice of Determination for the project pursuant to the provisions of the California Environmental Quality Act (CEQA). Staff considered the EIR and has prepared written findings documenting WCB's compliance with CEQA.

STAFF RECOMMENDATION
Staff recommended that the Wildlife Conservation Board adopt the written findings and approve this project as proposed; allocate $4,000,000.00 from the Water Security, Clean Drinking Water, Coastal and Beach Protection Fund (Proposition 50), Section 79572(a); authorize staff to enter into appropriate agreements necessary to accomplish this project; and authorize staff and the Department of Fish and Game to proceed substantially as planned.

Mr. Perrine introduced Ms. Suzanne Goode, Senior Resource Ecologist from the Department of Parks and Recreation; Ms. Mary Small, Deputy Director, and Ms. Kara Kemmler, Project Manager, both from the State Coastal Conservancy; and Mr. Mark Abramson from Santa Monica Bay Restoration Foundation, who were in the audience and available to answer questions.

Ms. Finn asked why we are doing the restoration again if it was already done about 30 years ago. Mr. Perrine responded it was not done wrong but that we have learned a lot after all these years, and now all this knowledge will be applied to the restoration process. Mr. McCamman asked if this property has been in Department of Parks and Recreation ownership since 1960s.
Mr. Perrine confirmed that this is correct.

Ms. Athena Shlien, a surfer and Malibu resident, spoke in opposition to this

project. Ms. Shlien stated that she believes that the draining, dredging and bulldozing of 13 acres at Malibu Lagoon is not a good solution and that over 4,000 petition signatures were collected. According to Ms. Shlien, the real problem is the urban run-off, which contains fertilizers, pesticides, medication and other pollutants, and this restoration is not going to solve that. Ms. Shlien added that the lagoon is filtering the toxins before they reach the ocean. Ms. Shlien said that she agrees with the plan to add 2 acres to this existing area, but she does not believe that taking away this current wetland will solve the problem. Ms. Shlien mentioned the inconvenience for beach visitors during the restoration, such as diesel smell, inability to use the beach, and water contamination from construction run-off. Ms. Shlien cited the plan as not democratic, non-transparent over the years, and inconsistent with desires of the public. Ms. Shlien added that she and other opponents of this project favor a gentler plan to restore this lagoon and asked the Board to not approve this project.

Ms. Marcia Hanscom with the Wetlands Defense Fund introduced herself and spoke in opposition to this project. Ms. Hanscom said that she came here representing several other organizations, such as San Bernardo Audubon and Pasadena Audubon, which are in agreement with her. Ms. Hanscom stated that there are a lot of mischaracterizations in terms of what this project is. Ms. Hanscom said that the description talks about removing non-native plants, and while she agrees with that, the majority of the acreage is native habitat. Ms. Hanscom stated that this wetland is not regular salt water marsh, and it is open to the sea only during winter months, so it is more fresh water environment. Ms. Hanscom added that this entire habitat will be lost due to the restoration. Ms. Hanscom said that, according to CEQA, it is required to make sure that there are no other less damaging alternatives, and Mr. Wayne Ferren, a top wetland scientist in Southern California, who worked for UC Santa Barbara for 25 years, presented a feasible alternative where we would restore only two acres. Ms. Hanscom said that draining the entire marsh, dredging it and trying to turn it into tidal system is not a solution here. Ms. Hanscom added that she thinks that the DFG biologists did not have enough staffing to do the proper analysis on this project. Ms. Hanscom stated that the endangered fish, the tide water goby, does not need the high water circulation; it needs still water, and it has been thriving there since 1990s. Ms. Hanscom stated that changes in the system will result in the long-term damage and it is unknown if the tide water goby will survive in this new system. Ms. Hanscom also added that, in a biological opinion from the Fish and Wildlife Service, summer months are very important for tide water goby's reproduction, and that is when the project is happening. Ms. Hanscom urged the Board to decline this project.

Mr. McCamman asked about the time frame of the construction on this project. Mr. Perrine responded that the construction phase for this project is two years – one year for actual construction and one for replanting, if necessary.

Ms. Finn asked if staff could speak to the comments made by Ms. Shlien and Ms. Hanscom.

Ms. Suzanne Goode from the Department of Parks and Recreation introduced herself before the Board and spoke in support of this project. Ms. Goode said that the intense construction phase will be done in less than three months, and the two years include the monitoring, which will continue for five years, to make sure that the re-vegetation method succeeds. Mr. Goode responded to the previous testimony on this project by saying that this project in not intended to change the nature of the lagoon; it is a brackish lagoon and it will remain closed most time of the year. Ms. Goode explained that with the restoration, there will be additional circulation in the western portion of the lagoon, both when lagoon is open and when it is closed. Ms. Goode said that lagoon opens up in winter time, allows all of the tide to come in and this normal occurrence will continue to happen, and when it closes, it will stay closed. Ms. Goode added that the tide water goby is thriving in the lagoon, and it tends to hang out more in the main channel of the lagoon because there is a sandy bottom that it prefers for breeding substrate. The additional flushing that will occur once this project is completed will create more of a sandy bottom in the western arm of the lagoon and making it more attractive to the tide water goby. Ms. Goode commented that the bridges on the site create pinch points which prevent the circulation within the lagoon. Ms. Goode stated that this project has a widespread support and has been in the works for about twenty years. Ms. Goode added that this project is the number one tidal wetland priority for Southern California, and that many scientists worked in project's scientific advisory panel, including Dr. Richard Ambrose of UCLA and Dr. Martha Satula of Southern California Coastal Waters Research Project. Ms. Finn asked what impact will be done to the beach. Ms. Goode responded that the beach will not be impacted, and added that there is a very complicated and thorough de-watering plan in place that will discharge completely clean water from the lagoon.

Ms. Kara Kemmler from the State Coastal Conservancy introduced herself and spoke in support of this project. Ms. Kemmler clarified that there are multiple sensitive species on this site that we are managing for, and while it was recognized that during construction there would be some short-term impact, the project will have long-term benefits to all sensitive species. Ms. Kemmler added that there is no work proposed on the main lagoon, providing a refuge area for birds and fish during construction. Ms. Finn asked if the public access will improve with this project. Ms. Kemmler responded that with a new parking lot a perimeter path will be about 200 feet longer, and there is an interpretive program proposed that involves multiple notes on that new pathway. Ms. Finn asked if the Water Resources Control Board funding has already been approved. Ms. Kemmler confirmed that it has been approved.

Mr. McCamman asked if there were any additional questions or comments about this item. There were none.

It was moved by Ms. Finn that the Wildlife Conservation Board adopt the written findings and approve this project as proposed; allocate $4,000,000.00 from the Water Security, Clean Drinking Water, Coastal and Beach Protection Fund (Proposition 50), Section 79572(a); authorize staff to enter into appropriate agreements necessary to accomplish this project; and authorize staff and the Department of Fish and Game to proceed substantially as planned.

Motion carried.

29. Tejon Ranch $15,800,000.00
Kern and Los Angeles Counties

Mr. Donnelly reported that letters of support for this project were received from the following people: Mr. Joel Reynolds, Senior Attorney, Director, Urban Program, Natural Resources Defense Council; Mr. Graham Chisholm, Executive Director, Audubon California; Mr. Dan Silver, Executive Director, Endangered Habitat League; Ms. Traci Sheehan, Executive Director, Planning and Conservation League; Mr. Bill Center, Chair of the Board, Planning and Conservation League; Mr. Harry Love, Conservation Chair, Kern Audubon Society; Mr. Richard Hawley, Executive Director, Greenspace-the Cambria Land Trust; Mr. Jeffrey D. Parrish, Ph.D., Executive Director, Freedom to Roam; and Ms. Kristeen Penrod, Conservation Director, Science and Collaboration for Connected Wildlands.

This proposal was to consider the allocation for five grants to the Tejon Ranch Conservancy (Conservancy) to acquire five perpetual conservation easements over a total of 62,003± acres to protect significant natural landscapes and ecosystems, provide corridors linking separate habitat areas to prevent fragmentation, and promote the recovery of threatened and endangered species. The five easement properties are all situated within a larger property, known as Tejon Ranch, which comprises approximately 270,000 acres located in Kern and Los Angeles Counties. Mr. Jon Wilcox of the Wildlife Conservation Board briefly described the project and its location.

LOCATION
The Tejon Ranch is located along Interstate 5, approximately 60 miles north of Los Angeles and 30 miles south of Bakersfield. Its 422 square miles make it almost as large as the City of Los Angeles and about 40% the size of Rhode Island. The project provides a key linkage and wildlife corridors between the southern region of the Sierra Nevada Mountains and the Tehachapi Mountains.

PROJECT DESCRIPTION
Tejon Ranch was founded in 1843 as a Mexican land grant and through the decades the Ranch grew in size as additional land grants were purchased by

General Edward Fitzgerald Beale. The Ranch contains a mosaic of rugged mountains, steep canyons, oak covered rolling hills, and broad valleys.

The landowner has agreed to convey five conservation easements over Tejon Ranch in accordance with the terms and conditions of the Tejon Ranch Conservation and Land Use Agreement. The Agreement was struck with the landowner, Natural Resources Defense Council, National Audubon Society, Planning and Conservation League, Sierra Club, Endangered Habitats League and the Conservancy.

Further the Tejon Ranch Company (TRC) has agreed to dedicate conservation easements over an additional 135,000 acres as TRC receives development approvals, with all dedications to occur within 30 years from final approval of the first development project.

Tejon Ranch straddles the Tehachapi Mountains, and lies at the confluence of four major ecological regions: Great Central Valley, Sierra Nevada, Mojave Desert, and Southwestern California. Thus, the diversity of plants and animals found on Tejon Ranch reflects its position at what has been termed a bio-geographic crossroads, where species unique to each of these regions can be found together on the Ranch. The east-west trending Tehachapi Mountains serve as the spine of regional landscape linkage between the Coast/Transverse Ranges to the west and the Sierra Nevada to the east.

Tejon Ranch lies at the center of this continentally significant linkage, protection of which has long been a conservation priority for many organizations and agencies. This linkage includes the last grassland corridor around the agricultural lands in the southern San Joaquin Valley, oak and pinyon-juniper woodlands that connect to the west and east slopes of the Sierra Nevada respectively, and “sky islands” of conifer habitat connecting the more extensive conifer forests in the adjacent Transverse Range and Sierra Nevada. Tejon Ranch appears to be a hotspot of evolution, where a large number of different species and subspecies have evolved over time. The Ranch is also characterized by a significant amount of topographic complexity – over 6,000 feet of elevation change, major north-south and east-west trending canyons, and a well distributed diversity of slopes and aspects – thereby providing landscape resilience and a potential refugium for species in the face of climate change.

The easement areas support a wide-variety of plant and animal species, including a number of special status species. These include bald and golden eagles, tricolored black bird, San Joaquin kit fox, Swainson’s hawk, American badger, and Bakersfield cactus.

Tejon Ranch contains a very rich record of intact prehistoric archaeological sites resulting from three different adaptive systems, dating back at least 4000

years. Tejon Ranch was the location of the first Indian reservation in the U.S., established in 1853. The sites associated with this reservation are remarkably well preserved. They represent the single best, and most complete, archaeological district of historical-era Native American sites in California.

The Pacific Crest Trail (PCT) runs through a portion of the Ranch and one of the easement areas will be bisected by the future realignment of the PCT.

The five easement areas are explained in more detail below:

White Wolf. The 16,178-acre White Wolf easement area is located entirely within Kern County. The easement area is bounded by the Tejon Ranch property boundary to the west, near top of slope to the north, and a varying contour line to the south and east. Highways 58 and 223 traverse the easement area, and secondary county-maintained roads include Deer Trail Road in the southern portion and Bena and Caliente-Bodfish roads cut across the northern portion. The Bakersfield National Cemetery inholding lies within White Wolf. Current land uses in the easement area are cattle ranching, wildlife management (hunting), and mining. Approximately 10,969 acres of the easement area is under Williamson Act contract, within which 93 acres of that have a non-renewal notice filed.

White Wolf supports four primary natural community types: grassland, oak woodland, scrub, and riparian. The grassland community type (14,222 acres) is found on the San Joaquin Valley floor and lower foothills of the Tehachapi Mountains. At higher elevations and northeast facing slopes of the Tehachapi Mountain foothills, grasslands transition to oak woodlands (1,748 acres), both open savanna and closed woodland types.

Shrub communities (133 acres) are scattered on slopes within grassland communities. Riparian communities (75 acres) are associated with drainages on the flank of Bear Mountain, tributaries of Caliente Creek, and springs and areas with very high groundwater. Within these four major communities, a wide array of plant species associations or alliances can be found. Excluding designated mining areas, all of the natural communities within White Wolf are generally devoid of human alteration and support high quality resource conditions.

Some of the special status species documented within the White Wolf easement include Tejon poppy, Swainson's hawk, tricolored blackbird, American badger and San Joaquin kit fox.

Michener. The 1,585-acre Michener easement area is located within Los Angeles County. The easement area is bounded by the Tejon Ranch property boundary to the south, west and east, and the north ends of T8N, R19W, Section 1 and T8N, R18W, Section 6. Current land uses in the easement area

are cattle ranching and wildlife management (hunting). There are no Williamson Act contracts in Los Angeles County. The majority of the property (1,456 acres) lies with Los Angeles County Significant Ecological Area #59.

Michener supports grassland and oak woodland natural community types. Oak woodlands (467 acres) tend to be associated with north and east facing canyons, which are surrounded by grassland communities (1,118 acres). It is a fairly species rich area for its size, with a relatively high percentage of native species. All of the natural communities within Michener are generally devoid of human alteration and support high quality resource conditions.

Michener supports two primary drainages: Bear Canyon and Crane Canyon, which drain north to Castac Lake. Michener comprises an approximately 2-mile portion of a regional habitat linkage design proposed by the South Coast Wildlands Project (Penrod et al. 2003) to conserve connectivity for a broad suite of plant and animal species.

Tri-Centennial. The 7,183-acre Tri-Centennial easement area is located entirely within Kern County. The easement area is bounded by the Tejon Ranch property boundary to the south, the approximately 4,500-foot elevation contour to the north, the extension of 290th Street to the west, and T9N, R16W, Section 9 to the east. Current land uses in the easement area are cattle ranching and wildlife management (hunting). The entire easement area is under Williamson Act contract.

Tri-Centennial supports natural communities that can be grouped into four major types: grasslands, shrub, riparian, and Joshua tree woodland. The grassland community type (3,316 acres) is found on the Antelope Valley floor and dissected alluvial terraces of the Tehachapi Mountains. Scrub communities (2,652 acres), including both chaparral and desert scrub habitats, occur along the foothills and alluvial terraces of the Tehachapi Mountains. Riparian communities (534 acres) are found in Antelope Canyon, the only significant stream draining the southern slopes of the Tehachapi Mountains, and springs discharging along the foothills and alluvial terraces. Joshua tree woodlands (681 acres) are found within Canyon del Gato Montes and some adjacent alluvial fans. All of the natural communities within Tri-Centennial are generally devoid of human alteration and support high quality resource conditions. The flora of Tri-Centennial is characterized by a high percentage (92%) of native species and many unique plant assemblages. The desert scrub communities in Tri-Centennial are of particularly high quality. These scrub communities generally have very low levels of disturbance, low levels of nonnative plant species, and a high diversity of native shrubs, forbs and grasses.

Tri-Centennial supports a series of small, intact watersheds draining the southern slope of the Tehachapi Mountains. Tri-Centennial comprises an

approximately 4-mile portion of a regional habitat linkage design proposed by the South Coast Wildlands Project to conserve connectivity for a broad suite of plant and animal species.

Special status species documented within Tri-Centennial include the Loggerhead shrike and Tehachapi pocket mouse.

Old Headquarters. The 26,716-acre Old Headquarters easement area is located entirely within Kern County. The easement area is bounded by the Tejon Ranch property boundary to the northeast, approximately the 2,000-foot contour to the southeast, between a 1,100 to 2,400-foot contour to the north and a varying contour line to the west. The site of the original headquarters of the Tejon Ranch Company lies within the easement area, which currently support numerous houses, barns, and workshops. Current land uses in the easement area are cattle ranching, wildlife management (hunting), and oil and gas extraction. Approximately 12,920 acres of the easement area is under Williamson Act contract.

Old Headquarters supports natural communities that can be grouped into three major types: grasslands, oak woodlands, and riparian. The grassland community type (21,435 acres) is found on the San Joaquin Valley floor, Tejon Hills, and lower foothills of the Tehachapi Mountains. At higher elevations and northeast facing slopes of the Tehachapi Mountain foothills, grasslands transition to oak woodlands (2,537 acres), both open savanna and closed woodland types. Riparian communities (1,592 acres) are associated with drainages traversing Old Headquarters and springs and areas with very high groundwater. Within these three major communities, a wide array of plant species associations or alliances can be found. There is also a grove of nonnative eucalyptus trees near the agricultural areas (18 acres).

There are three major watersheds comprising Old Headquarters: Tejon Creek, El Paso Creek, and Tunis Creek. All of these watersheds drain to the Tulare Lake Hydrologic Region of the southern San Joaquin Valley.

Old Headquarters comprises an approximately 10-mile portion of a regional habitat linkage design proposed by the South Coast Wildlands Project to conserve connectivity for a broad suite of plant and animal species. With the exception of the Designated Farming and Disturbance Areas, the majority of natural communities within Old Headquarters is generally devoid of human alteration and provides connectivity functions for many San Joaquin Valley species.

Some of the special status species documented within Old Headquarters include the Bakersfield cactus, Striped adobe lily, Tejon poppy, Western spadefoot, bald eagle, golden eagle, San Joaquin kit fox, northern harrier and tricolored blackbird.

Bi-Centennial. The 11,026-acre Bi-Centennial easement area is located within both Kern (10,777 acres) and Los Angeles (249 acres) counties. The easement area is bounded by the Tejon Ranch property boundary and the Kern/Los Angeles County line to the south, the extension of 290th Street to the east, the National Cement lease boundary to the west, and extends north to a boundary line between the 3,500 and 4,500-foot contours. The Bi-Centennial easement area is essentially bisected by the proposed future conservation easement corridor for a realignment of the Pacific Crest Trail through Tejon Ranch. Current land uses in the easement area are cattle ranching, wildlife management (hunting), mining, agriculture, and a series of infiltration basins associated with the Tejon Ranch Company (TRC) Water Bank. The California Aqueduct traverses the western portion of the easement area. Approximately 7,044 acres of the eastern two-thirds of the easement area is under Williamson Act contract.

Bi-Centennial supports natural communities that can be grouped into four major types: grasslands, shrub, oak woodlands, and riparian. The grassland community type (5,847 acres) is found on the Antelope Valley floor and dissected alluvial terraces of the Tehachapi Mountains. Scrub communities (3,475 acres), including both chaparral and desert scrub habitats, occur along the foothills and alluvial terraces of the Tehachapi Mountains. At higher elevations between Los Alamos and Big Sycamore canyons, grasslands transition to open oak woodlands (628 acres). Riparian communities (847 acres) are associated with streams draining the southern slopes of the Tehachapi Mountains and springs discharging along the foothills and alluvial terraces. Except for the designated mining and agricultural areas and TRC Water Bank, all of the natural communities within Bi-Centennial are generally devoid of human alteration and support high quality resource conditions. In particular, Bi-Centennial supports outstanding native grasslands, and Bi-Centennial is well-known for its very showy native wildflower displays in the spring.

Bi-Centennial supports a series of small watersheds draining the southern slope of the Tehachapi Mountains, including Los Alamos Canyon, Little Sycamore Canyon, Bronco Canyon, and Pescado Creek, and a number of unnamed drainages. All of these watersheds drain to the Antelope Hydrologic Unit of the Lahontan Region in the western Antelope Valley.

Some of the special status species documented within Bi-Centennial include the silvery false lupine, Adobe yampah, coast horned lizard, northern harrier, loggerhead shrike, tricolored blackbird, burrowing owl and the Tehachapi pocket mouse.

The Bi-Centennial easement area in the Antelope Valley portion of the Ranch supports an approximately 7-mile wide swath of the southern foothills of the Tehachapi Mountains rising approximately 1,500 feet from the Mojave Desert

floor. Bi-Centennial is visible from surrounding communities, such as Palmdale, Lancaster, and Neenach, visitors to the Antelope Valley Poppy Preserve, and by travelers on Highway 138.

WCB PROGRAM

The proposed grant for this project is being made under the Land Acquisition Program at WCB. The Acquisition Program is administered pursuant to the WCB's original enabling legislation, the Wildlife Conservation Law of 1947 (Fish and Game Section 1300, et seq.) to acquire areas that can successfully sustain wildlife and provide for suitable recreation opportunities. Under this program acquisition activities are carried out in conjunction with the DFG, evaluating the biological values of property through development of a Land Acquisition Evaluation (LAE)/Conceptual Area Protection Plan (CAPP). The LAE/CAPP is then submitted to DFG's Regional Operations Committee (ROC) for review and approval and later transmitted to the WCB with a recommendation to fund.

MANAGEMENT OBJECTIVES AND NEEDS

Under the terms of the conservation easements, the landowner will continue Ranch activities, including ranching /livestock management, farming, hunting and other wildlife management activities and water banking. The Conservancy will hold the conservation easements and will monitor the property for compliance with the purposes, terms and conditions of the conservation easements. Monitoring will be performed by the Conservancy staff.

Day to day operations and overall management will be carried out consistent with a management plan. The Interim Ranch-Wide Management Plan (IRWMP) and subsequent Ranch-Wide Management Plan (RWMP), identifies and assess natural resource and conservation attributes of the conserved lands in order to develop sustainable stewardship management strategies that provide for protection and enhancement of natural resources values and management of existing ranch uses. In addition the RWMP will establish best management practices for continued use of the conserved lands for existing ranch uses.

Public enjoyment of the conserved lands is high priority of the Conservancy and TRC. Both parties have agreed to establish and implement a public access plan that encourages and facilitates public access, including public access opportunities for underserved populations.

TERMS

The property owner has agreed to sell the conservation easements for the Department of General Services' (DGS) approved combined appraised fair market value of $15,750,000.00. The DGS approved combined fee interest value is $49,720,000.00. The terms and conditions of the proposed grant to the Conservancy provide that staff of the WCB will review and approve all title documents, appraisals, preliminary title reports, documents for purchase and

sale, escrow instructions and instruments of conveyance prior to disbursement of funds directly into the escrow account(s) established for the acquisition. In the event of breach of the grant terms, the WCB can request the conveyance of the conservation easement to the State and/or seek reimbursement of funds.

The separate DGS approved conservation easement values are broken down below:

Conservation Easement Area	Conservation Easement Value	Acres
White Wolf	$4,340,000.00	15,500
Old Headquarters	$7,050,000.00	26,717
Michener	$450,000.00	1,585
Bi-Centennial	$2,910,000.00	11,019
Tri-Centennial	$1,000,000.00	7,183

PROJECT FUNDING

The WCB will be funding the entire purchase price.

Wildlife Conservation Board	**$15,750,000.00**
TOTAL Purchase Price	$15,750,000.00
Other Project-related Costs:	50,000.00
TOTAL WCB Allocation	**$15,800,000.00**

It is estimated that and additional $50,000.00 will be needed to cover project-related expenses, including DGS appraisal review and independent appraisal reviews.

FUNDING SOURCE

The proposed funding source for this acquisition is the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Fund of 2006 (Proposition 84), Section 75055(b). This fund allows for acquisition and protection of habitat that promotes recovery of threatened and endangered species; provides corridors linking separate habitat areas to prevent fragmentation; and protects significant landscapes and ecosystems, including old growth redwoods, mixed conifer forests, oak woodlands, riparian habitat and other significant habitats and is consistent with the objectives of this project.

ENVIRONMENTAL COMPLIANCE AND STATE RECOMMENDATION

The project has been reviewed for compliance with the California Environmental Quality Act (CEQA) requirements and is proposed as exempt under CEQA Guidelines Section 15313, Class 13, as an acquisition of land for wildlife conservation purposes, and Section 15325, Class 25, as a transfer of an ownership interest in land to preserve open space. Subject to authorization by the WCB, a Notice of Exemption will be filed with the State Clearinghouse.

STAFF RECOMMENDATION
Staff recommended that the Wildlife Conservation Board approve the grants to the Tejon Ranch Conservancy for its acquisition of the conservation easements as proposed; allocate $15,800,000.00 from the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Fund of 2006 (Proposition 84), Section 75055(b) to cover the grant amounts and pay internal project-related expenses; authorize staff to enter into appropriate agreements necessary to accomplish this project; and authorize staff and the Department of Fish and Game to proceed substantially as planned.

Mr. Wilcox introduced Mr. Robert Stine, President of the Tejon Ranch Company; Mr. Tom Maloney, Executive Director, from the Tejon Ranch Conservancy; and Mr. Graham Chisholm, Executive Director of the Audubon California, who were in the audience and available to answer questions.

Ms. Finn asked why we are having five separate grants in this project. Mr. Wilcox responded that there are special requirement uses for each area, and there are four different regions involved in this project. Ms. Colborn asked if the oil and mining activities will continue and if they are compatible with the conservation plans and purposes. Mr. Wilcox responded that these activities are limited to where they occur now and the uses are provided for in the conservation easement and will continue. Mr. Wilcox added that the Tejon Conservancy will monitor the activities and will be responsible for those items.

Mr. Maloney introduced himself before the Board and spoke in support of this project. Mr. Maloney mentioned the importance of public access and said that the Tejon Ranch Conservancy has been working closely with different organizations and the public to get a better understanding and use of public access on the property. Mr. Maloney said that community hikes are very popular in the area, especially during wildflowers blooming season. Mr. Maloney commented that the Pacific Crest Trail realignment, that represents 38 miles of public access, routing has been agreed to between the US Forest Service, Pacific Crest Trail Association, Tejon Ranch Conservancy and the fee holder, Tejon Ranch Company, are currently working on conveyance agreement.

Mr. McCamman mentioned hunting opportunities that are now on the property and asked if they will continue as the Tejon Conservancy will manage the property. Mr. Maloney responded that hunting opportunities will continue. Mr. Maloney also added that four principal uses that the fee holder will continue on the conserved lands are cattle ranching, the hunt program, wildlife management program, and the filming activity; each of these activities will be subject to the ranch-wide management plan, prepared by the Conservancy.

Ms. Finn had a question about public access. Mr. Maloney replied that, until the first ranch-wide management plan is due in 2013, the Conservancy is

working on an annual basis in coordination with Tejon Ranch Company natural resources staff to arrange hikes, and commented that this coordination is working extremely well. Mr. Maloney said that the public access plan will be essential component of the ranch-wide management plan.

Mr. EJ Remson of TNC introduced himself and said that he came to today's Board meeting representing two groups: The Nature Conservancy and Southern Sierra Partnership, and spoke in support of this project. Mr. Remson said that this project is among the highest priority for conservation in the State. Mr. Remson also stated that this project represents about a 60 mile linkage that connects the coastal ranges with the southern Sierra Nevada Mountains.

Mr. McCamman commented that several years ago, the Governor signed the agreement which led to this acquisition and was identified at that time as a high priority project.

Mr. Donnelly commented that it is hard to summarize the amount of work, the amount of frustration and pleasure that goes into landmark projects such as this one, and he wanted to acknowledge and express his gratitude to the people who put their work into this project and were in the audience today. Mr. Donnelly recognized Ms. Nancy Templeton and Mr. Jon Wilcox of the Wildlife Conservation Board; Ms. Catherine Caldwell, the initial land agent who started working on this project; Mr. Bob Stine, President of the Tejon Ranch Company; Mr. Graham Chisholm, Executive Director of the Audubon California. Mr. McCamman also acknowledged in audience Mr. Todd Ferrara from California Natural Resources Agency who has been working on this project for several years.

Mr. McCamman asked if there were any other questions or comments about this item. There were none.

It was moved by Ms. Finn that the Wildlife Conservation Board approve the grants to the Tejon Ranch Conservancy for its acquisition of the conservation easements as proposed; allocate $15,800,000.00 from the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Fund of 2006 (Proposition 84), Section 75055(b) to cover the grant amounts and pay internal project-related expenses; authorize staff to enter into appropriate agreements necessary to accomplish this project; and authorize staff and the Department of Fish and Game to proceed substantially as planned.

Motion carried.

30. Bottle Peak $3,562,900.00
San Diego County

Mr. Donnelly reported that a letter of support for this project was received from Mr. Dan Silver, Executive Director of the Endangered Habitat League.

This was a proposal to consider the allocation for a grant to The Escondido Creek Conservancy (TECC) to assist with the acquisition of 418± acres of property to anchor regional habitat conservation planning efforts, in central San Diego County and provide a critical ecological link between coastal habitat and the higher elevation Cleveland National Forest. Ms. Teri Muzik of the Wildlife Conservation Board briefly described the project and its location.

LOCATION
The subject property is located east of Interstate Highway 15 and west of Lake Wohlford on the northeasterly border of the City of Escondido in San Diego County. The property has been identified by the Department of Fish and Game (DFG) as a priority for protection in the Rancho Guejito Conceptual Area Protection Plan (CAPP). The subject property is strategically located west of Guejito Ranch and contributes to a north-south habitat linkage between the South San Diego County Multiple Species Conservation Program (MSCP) and the North San Diego County Multiple Species Conservation Plan (NC MSCP).

PROJECT DESCRIPTION
The subject property contains a variety of significant biological resources. The existing natural open space represents a large portion of the remaining open space in the contiguous unincorporated region of the City of Escondido and supports many sensitive plant and animal species including the federally threatened coastal California gnatcatcher, coast live and Engelmann oak woodlands, various types of chaparral, coastal sage scrub, grasslands and riparian habitats. Based on its topography, native vegetation, large north-south canyon/drainage and adjacent open space areas, the property provides essential landscape linkage, habitat biodiversity and an important natural linkage for wildlife corridors at the intersection of the MSCP and the NC MSCP. Acquisition of the subject property will also create a significant habitat and open space buffer from the more urbanized areas to the west.

WCB PROGRAM
The proposed grant for this project is being made under the Land Acquisition Program at WCB. The Acquisition Program is administered pursuant to the WCB's original enabling legislation, The Wildlife Conservation Law of 1947 (Fish and Game Code Section 1300 et seq.) to acquire areas that can successfully sustain wildlife and provide for suitable recreation opportunities. Under this program, acquisition activities are carried out in conjunction with the DFG, evaluating the biological values of property through development of a Land Acquisition Evaluation (LAE)/Conceptual Area Protection Plan (CAPP).

The LAE/CAPP is then submitted to DFG's Regional Operations Committee (ROC) for review and approval and later transmitted to the WCB with a recommendation to fund.

MANAGEMENT OBJECTIVES AND NEEDS

TECC is a non-profit, public benefit corporation dedicated to the preservation, restoration and protection of the natural open space within the Escondido Creek watershed. It currently owns and/or manages approximately 266 acres of land in seven separate ownerships in the Escondido Creek watershed, spanning roughly between the Cities of Encinitas and Escondido. The landowner is considering making an endowment to TECC for management of this property.

Since this project will be managed by TECC consistent with the guidelines established for the MSCP and NC MSCP plans, public access to the property will be minimal but will likely include access for educational and scientific studies. If appropriate, guided tours by local groups may also be considered by TECC.

The WCB grant agreement requires annual monitoring by TECC and access to the property by WCB/DFG not less than once every three years to conduct monitoring.

TERMS

This proposed acquisition is for approximately one-half (417±) of the total acreage (800±) of the subject property. The full property was appraised and the appraisal was approved by the Department of General Services (DGS). Before the project could be completed, the available bond funding was frozen and the project was placed on hold. When funding was again available, the appraisal was updated. The value had decreased and the updated appraisal was reviewed and approved by the DGS. Due to budget constraints, the project was scaled back to the current acreage. After consultation with the DGS appraisal review staff, the per-acre value in the updated appraisal of the whole property was deemed to be applicable to the current project. The landowner has agreed to sell the property for the approved, appraised value of $3,552,900.00.

The terms and conditions of the proposed grant to TECC provide that staff of the WCB will review and approve all preliminary title reports, title documents, documents for purchase and sale, instruments of conveyance, and escrow instructions prior to disbursement of funds directly in the escrow account established for the acquisition.

PROJECT FUNDING

The WCB proposes to make a grant to TECC for the full amount of the purchase price.

Wildlife Conservation Board	**$3,552,900.00**
Other Project-related Costs:	10,000.00
TOTAL WCB Allocation	**$3,562,900.00**

It is estimated that an additional $10,000.00 will be needed to cover project-related expenses, including DGS appraisal review costs.

FUNDING SOURCE
The purposes of this project are consistent with the proposed funding source, Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Fund of 2006 (Proposition 84), Section 75055(c), that allows for grants to implement or assist in the establishment of Natural Community Conservation Plans.

ENVIRONMENTAL COMPLIANCE AND STATE RECOMMENDATION
The acquisition has been reviewed for compliance with the California Environmental Quality Act (CEQA) requirements and is proposed as exempt under CEQA Guidelines Section 15313, Class 13, as an acquisition of land for wildlife conservation purposes, and Section 15325, Class 25, as a transfer of an ownership interest in land to preserve open space. Subject to authorization by the WCB, a Notice of Exemption will be filed with the State Clearinghouse.

STAFF RECOMMENDATION
Staff recommended that the Wildlife Conservation Board approve this project as proposed; allocate $3,562,900.00 from the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Fund of 2006 (Proposition 84), Section 75055(c) to cover the grant amount and internal project-related expenses; authorize staff to enter into appropriate agreements necessary to accomplish this project; and authorize staff and the Department of Fish and Game to proceed substantially as planned.

Ms. Muzik introduced Mr. Greg Lowther, the landowner's representative, who was in the audience and available to answer questions.

Ms. Finn asked if the Escondido Creek Conservancy has enough resources to manage the property. Ms. Muzik confirmed that this is correct.

Mr. Lowther introduced himself before the Board and said that the landowner is giving an endowment for $240,000.00 with an option for the State to purchase the remaining 800 acres. Ms. Finn asked if this option is for the State, not for the Conservancy. Ms. Muzik commented that this is the Right of First Refusal, so this is the option for the State.

Mr. McCamman asked if there were any questions or comments about this item. There were none.

It was moved by Ms. Finn that the Wildlife Conservation Board approve this project as proposed; allocate $3,562,900.00 from the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Fund of 2006 (Proposition 84), Section 75055(c) to cover the grant amount and internal project-related expenses; authorize staff to enter into appropriate agreements necessary to accomplish this project; and authorize staff and the Department of Fish and Game to proceed substantially as planned.

Motion carried.

31. DFG Presentation Informational
Conservation and Habitat Mapping

Ms. Monica Parisi from the Department of Fish and Game presented this item.

In 2010, the Department of Fish and Game (Department) completed work on two complementary statewide mapping and modeling efforts. To guide and inform its priorities for species and habitat conservation in service of its broad mission to conserve California's natural resources for both ecological and recreational values, the Department undertook Areas of Conservation Emphasis II (ACE II). The primary focus of ACE II was to collect and summarize the best available statewide spatial data on biological richness, including species diversity, rarity, and sensitive habitats. Information on recreational needs and opportunities throughout the State, including fishing, hunting and wildlife-viewing, was also compiled. Because a functional network of connected wildlands is essential to the continued support of California's diverse natural communities in the face of both human development and climate change, the Department partnered with Caltrans on the California Essential Habitat Connectivity (Connectivity) Project -- a commissioned study to identify large remaining blocks of intact habitat or natural landscape and model linkages between them that need to be maintained, particularly as corridors for wildlife.

The projects shared the goal of using the best available science, data sets, spatial analyses and modeling techniques in a process both transparent and repeatable. They supplement, and in many cases validate, earlier approaches to identify priorities by having experts with on-the-ground knowledge hand draw areas of high biological, recreational, or connectivity value on large maps.

Rather than produce single statewide maps depicting priorities, both projects produced a set of Geographic Information System (GIS) data layers than can be used flexibly to inform decision-making. ACE II layers represent specific biological and recreational values, threats, and landscape considerations at a consistent scale of 2.5 square mile hexagons that can be combined in various ways to identify priorities for conservation, depending on management question

or funding opportunity. The Connectivity Project has one layer identifying large intact habitat blocks, another modeling the “path of least resistance” or “least cost corridor” between them, and a third showing places where only a road disrupts habitat connectivity and Caltrans can offer solutions for restoring a connection.

These two complementary mapping efforts will continue to aid the DFG and conservation partners in the development of Land Acquisition Evaluations and Conceptual Area Protection Plans. They are key to achieving a network of large connected reserves of high biological value -- a focus of the State Wildlife Action Plan, the California Climate Change Adaptation Strategy, land acquisition and management, and conservation planning across jurisdictional boundaries.

Ms. Finn asked if other conservancies or other land groups in the State can benefit from using this information. Ms. Parisi responded that the connectivity data has been out since February and people can download maps and other supporting materials. Ms. Parisi also added that the conservancies are represented on the technical mutli-disciplinary teams for the connectivity project. Ms. Diane Colborn had a question about miles Ms. Parisi mentioned in reference to the ACE Program. Ms. Parisi clarified that it is 2.5 square miles. Ms. Colborn asked how the Wildlife Conservation Board might be able to use the data. Ms. Parisi responded that this is a very simple process with connectivity data when you are looking at the corridor, which is actually rasterized data set, you can make it sort of semi-transparent, and you lay all the conserve lands underneath that in GIS, so you can see where the gaps are, and where one more acquisition can be completed. Ms. Colborn asked if Caltrans participated with the DFG in this connectivity project. Ms. Parisi replied that this is correct, and added that Caltrans are combining the data with their own database where they have wildlife crossings statistics where wildlife get hit, and Caltrans will use these two systems together to prioritize where they need to retrofit highway projects, and it would also help them being proactive to where actually site new transportation projects.

Mr. McCamman said that he would like to see how the projects that are being approved by this Board fit into CAPP programs in relation to the connectivity project. Mr. Donnelly commented that we have started this process as a part of restructuring of LAE and CAPP guidelines and criteria. Mr. Donnelly said that ACE II in the corridor mapping considerations are built into the work, and we should be able to incorporate into the agenda write-ups. Mr. Donnelly commented that there may be projects that we considered that come through other planning avenues such as Central Valley Joint Venture or South Coast Wetland Recovery Project, and Mr. Donnelly said that he would not want to foreclose the opportunity for the Wildlife Conservation Board to consider those projects even though the data was not secured through ACE II. Mr. McCamman agreed and commented that these data collection processes are

important. Mr. Donnelly commented that having this information available on the Internet and accessible by the public is very important. Ms. Finn asked if the Board Members can be updated on this item at a future meeting. Mr. Donnelly confirmed.

32. 2011 Wildlife Conservation Board Tentative Meeting Schedule — Informational

The Wildlife Conservation Board adopted the following Board Meeting schedule for the 2011:

February 24, 2011

June 2, 2011

August 25, 2011

November 17, 2011

Mr. Donnelly expressed his gratitude for the entire WCB staff for making this Board meeting successful. Mr. Donnelly also reported that one of the WCB staff, Ms. Janell Bogue, will be leaving the Wildlife Conservation Board. Mr. Donnelly also mentioned that this is the last meeting we will have our Board Members, Senator Patricia Wiggins and Assembly Member Ira Ruskin, represented at our Board. Mr. Donnelly thanked Ms. Teresa Schilling, Senator Wiggins's representative, and Ms. Erin Shaw, Assembly Member Ruskin's representative, for serving on the Board Legislative Advisory Committee.

With no further business to discuss, the meeting was adjourned at 12:45 P.M.

Respectfully submitted,

John Donnelly
Executive Director

PROGRAM STATEMENT

At the close of the meeting on November 18, 2010, the amount allocated to projects since the Wildlife Conservation Board's inception in 1947 totaled $2,234,062,144.78. This total includes funds reimbursed by the Federal Government under the Accelerated Public Works Program completed in 1966, the Land and Water Conservation Fund Program, the Anadromous Fish Act Program, the Sport Fish Restoration Act Program, the Pittman-Robertson Program, and the Estuarine Sanctuary Program.

The statement includes projects completed under the 1964 State Beach, Park, Recreational and Historical Facilities Bond Act, the 1970 Recreation and Fish and Wildlife Enhancement Bond Fund, the Bagley Conservation Fund, the State Beach, Park, Recreational and Historical Facilities Bond Act of 1974, the General Fund, the Energy Resources Fund, the Environmental License Plate Fund, the State, Urban and Coastal Park Bond Act of 1976, the 1984 Parklands Fund, the 1984 Fish and Wildlife Habitat Enhancement Bond Act, the California Wildlife, Coastal and Park Land Conservation Act of 1988, Cigarette and Tobacco Products Surtax Fund of 1988, California Wildlife Protection Act of 1990, the Safe, Clean, Reliable Water Supply Act of 1996, the Natural Resources Infrastructure Fund, the Harbors and Watercraft Revolving Fund, Forest Resources Improvement Fund, the Safe Neighborhood Parks, Clean Water, Clean Air, and Coastal Protection Bond, Safe Drinking Water, Clean Water, Watershed Protection, and Flood Protection Fund, California Clean Water, Clean Air, Safe Neighborhood Parks, and Coastal Protection Fund, Water Security, Clean Drinking Water, Coastal and Beach Protection Fund of 2002, Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Fund of 2006, and the Wildlife Restoration Fund. In addition to projects completed with the above funding sources, this statement includes tax credits awarded under the Natural Heritage Preservation Tax Credit Act. The tax credits are not reflected in the total amount allocated to projects.

A. Fish Hatchery and Stocking Projects		$16,006,219.06
B. Fish Habitat Preservation, Development & Improvement		41,962,415.28
Reservoir Construction or Improvement	5,605,699.00	
Stream Clearance and Improvement	28,543,077.09	
Stream Flow Maintenance Dams	542,719.86	
Marine Habitat	3,046,619.07	
Fish Screens, Ladders and Weir Projects	4,224,300.26	
C. Fishing Access Projects		53,441,681.40
Coastal and Bay	4,612,013.11	
River and Aqueduct Access	17,582,175.38	
Lake and Reservoir Access	10,494,639.87	
Piers	20,752,853.04	
D. Game Farm Projects		146,894.49
E. Wildlife Habitat Acquisition, Development and Improvement		2,058,230,332.93
Wildlife Areas (General)	414,853,091.24	

Miscellaneous Wildlife Habitat Development	21,751,962.86	
Wildlife Areas/Ecological Reserves, (Threatened, Endangered or Unique Habitat)	738,800,972.11	
Land Conservation Area	12,992,940.18	
Inland Wetlands Conser. Grants & Easements	25,724,296.36	
Riparian Habitat Conser. Grants & Easements	65,135,393.64	
Other Wildlife Habitat Grants	778,971,676.54	
F. Hunting Access Projects		636,898.57
G. Miscellaneous Projects (including leases)		22,123,289.94
H. Special Project Allocations		1,696,372.89
I. Miscellaneous Public Access Projects		39,284,585.15
State Owned	2,338,506.19	
Grants	36,946,078.96	
J. Sales and/or exchanges		533,455.07
K. Natural Heritage Preservation Tax Credit Act (tax credits awarded)		(48,598,734.00)
Statutory plans	(0.00)	
Corridors, wetlands, wildlife habitat, streams and riparian habitat	(6,234,658.00)	
Agricultural lands	(13,775,640.07)	
Water and water rights	(0.00)	
State and local parks, open space and archaeological resources	(28,588,435.93)	
Total Allocated to Projects		$2,234,062,144.78

ATTACHMENT 2

VOLLMAR CONSULTING
2003/2004 BOTANICAL SURVEY REPORT

VOLLMAR CONSULTING

NATURAL RESOURCE
CONSULTANTS

1055 Creston Road
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vollmarcosnulting.com

CENTENNIAL SPECIFIC PLAN PROJECT SITE

2003/2004 BOTANICAL SURVEY REPORT

LANDSCAPE SETTING
SPECIAL-STATUS PLANT SURVEYS
PERENNIAL BUNCHGRASS COMMUNITY STUDY

Prepared for:

Impact Sciences, Inc.
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Prepared by:

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December 3, 2004

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1.0 INTRODUCTION

This report presents the methods and results of botanical studies conducted by Vollmar Consulting during spring and summer of 2003 and 2004 on the Centennial Specific Plan project site. The studies were conducted to provide baseline information for assessing potential impacts of the proposed project to special-status plants and sensitive plant communities. The studies included special-status plant surveys, an ecological study of the perennial bunchgrass community predominant in the study area, and a detailed review of regional and site landscape features. These landscape features (especially geology, soils, and landscape position) strongly influence the distribution of sensitive botanical resources and their potential habitats in the study area.

The report is divided into the following four sections:

- Section 2.0: Background Information
- Section 3.0: Landscape Setting
- Section 4.0: Special-status Plant Surveys
- Section 5.0: Perennial Bunchgrass Plant Community Study

Section 2.0 provides information on site location, and defines the botanical study area. It also discusses the applicability of study results to project planning and permitting and lists the field staff involved in the studies.

Section 3.0 describes the regional and study area landscape features including geography, topography, geology, soils, habitats, and land use. These features are critical for understanding the distribution of occurrences and potential habitat for sensitive botanical resources throughout the study area as well as the factors influencing plant species diversity and richness. The information presented in this section is referred to throughout the remaining sections.

Section 4.0 presents the methods and results of comprehensive special-status plant surveys conducted in the study area. Surveys were conducted during peak spring and early summer flowering periods. The surveys were conducted to locate occurrences of special-status species and assess their microhabitat requirements. Survey data were used to assess the distribution of potential habitat for targeted species throughout the study area.

Section 5.0 presents the methods and results of an ecological study of the perennial bunchgrass community that occurs over much of the study area. This plant community has a relatively high cover of native perennial bunchgrasses and wildflowers, and a conspicuously low cover of introduced annual grasses. Historically, this community type occurred throughout interior lowland California but was almost entirely replaced by invasive annual grasses introduced during Europeans settlement. The bunchgrass stand on the site is unique in California as an extensive, high quality intact native perennial bunchgrass community. This study assessed the diversity and variation in cover of perennial bunchgrass species, wildflowers, and introduced annual grasses across different landscape positions. The study also compared the bunchgrass community on the site with other known occurrences in the region and across the state. The results can be used to assess potential impacts of the proposed project to this unique native perennial bunchgrass community.

2.0 BACKGROUND INFORMATION

2.1 Project Location

The project site is located east of I-5, adjacent to Highway 138 in NW Los Angeles County, California (Figure 2.1). It is situated in the far southwestern portion of Tejon Ranch, a 270,000-acre cattle ranch in the western Tehachapi Range. The site extends approximately six miles east to west parallel to the Highway 138 corridor and approximately four miles north to south.

2.2 Definition of the Study Area

The study area for this report incorporates approximately 9,542 acres within the larger 11,862-acre project planning area (Figure 2.2). The study area includes the 8,342-acre proposed development envelope plus a 500-foot wide buffer zone incorporating approximately 1,200 acres around the perimeter of the envelope.

2.3 Survey Intensity and Applicability of Results

The surveys conducted for this report were comprehensive in nature but do not represent complete present/absence surveys given the size of the study area and the size of the area surveyed each day by the field crew. However, they were systematic and intensive and it is likely that all special-status plant species present within the study area were detected and that nearly all occurrences of these species were identified and mapped. Two special-status species identified on the site, sylvan microseris (*Microseris sylvatica*) and Tucker oak (*Quercus john-tuckeri*), were quite abundant and high potential habitat areas rather than individual occurrences were mapped. The survey results may be used for specific project planning and permitting. An additional round of peak spring surveys and precise mapping of sylvan microseris and Tucker oak stands would be required to achieve full presence/absence survey results. It is unclear, however, if these additional surveys would be required to obtain project permits.

2.4 Project Personnel

Staff from Vollmar Consulting conducted all project work including background review, field surveys, and reporting. John Vollmar served as project manager, senior field botanist, and principal report author. John Hale and Jon Kelsey served as senior field botanists and Shannon Hickey, Vir McCoy, Gretchen Vos, Jeffrey Congero and Michele Disney served as assistant field botanists for one or both years. John Hale and Gretchen Vos managed species lists and ecological data from special-status plant occurrences. Shannon Hickey and Gretchen Vos assisted with field preparations, GPS set up, and report preparation. John Hale and John Vollmar photographed all special-status plants. John Vollmar and Gretchen Vos conducted statistical analyses of field data. Jake Schweitzer managed all GPS and GIS data and created report figures. Jon Kelsey, Richard Gilligan, and Pauline Alessi provided project logistical support.

Keith Babcock of Impact Sciences provided outside review of the report and coordinated with Tejon Ranch regarding ranch access and safety issues. Psomas Engineers, Forma Engineering, and Tejon Ranch provided background files that Mr. Schweitzer incorporated into report figures.

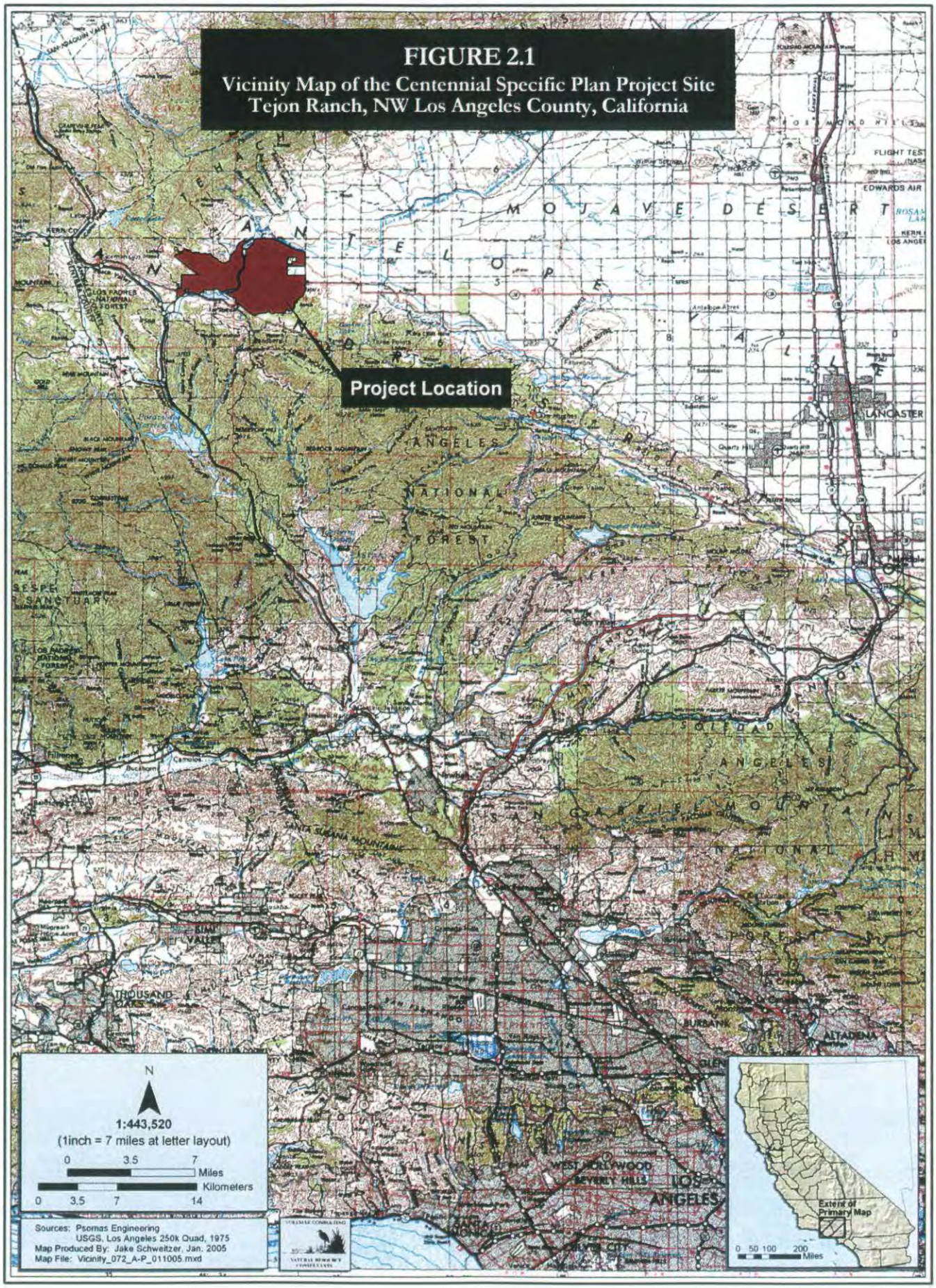
FIGURE 2.1
Vicinity Map of the Centennial Specific Plan Project Site
Tejon Ranch, NW Los Angeles County, California
Project Location
MOJAVE DESERT
ANTELOPE VALLEY
SAN GABRIEL MOUNTAINS
LANCASTER
EDWARDS AIR
FLIGHT TEST
N
1:443,520
(1inch = 7 miles at letter layout)
0 3.5 7
Miles
Kilometers
0 3.5 7 14
Sources: Psomas Engineering
USGS, Los Angeles 250k Quad, 1975
Map Produced By: Jake Schweitzer, Jan. 2005
Map File: Vicinity_072_A-P_011005.mxd
Extent of Primary Map
0 50 100 200
Miles

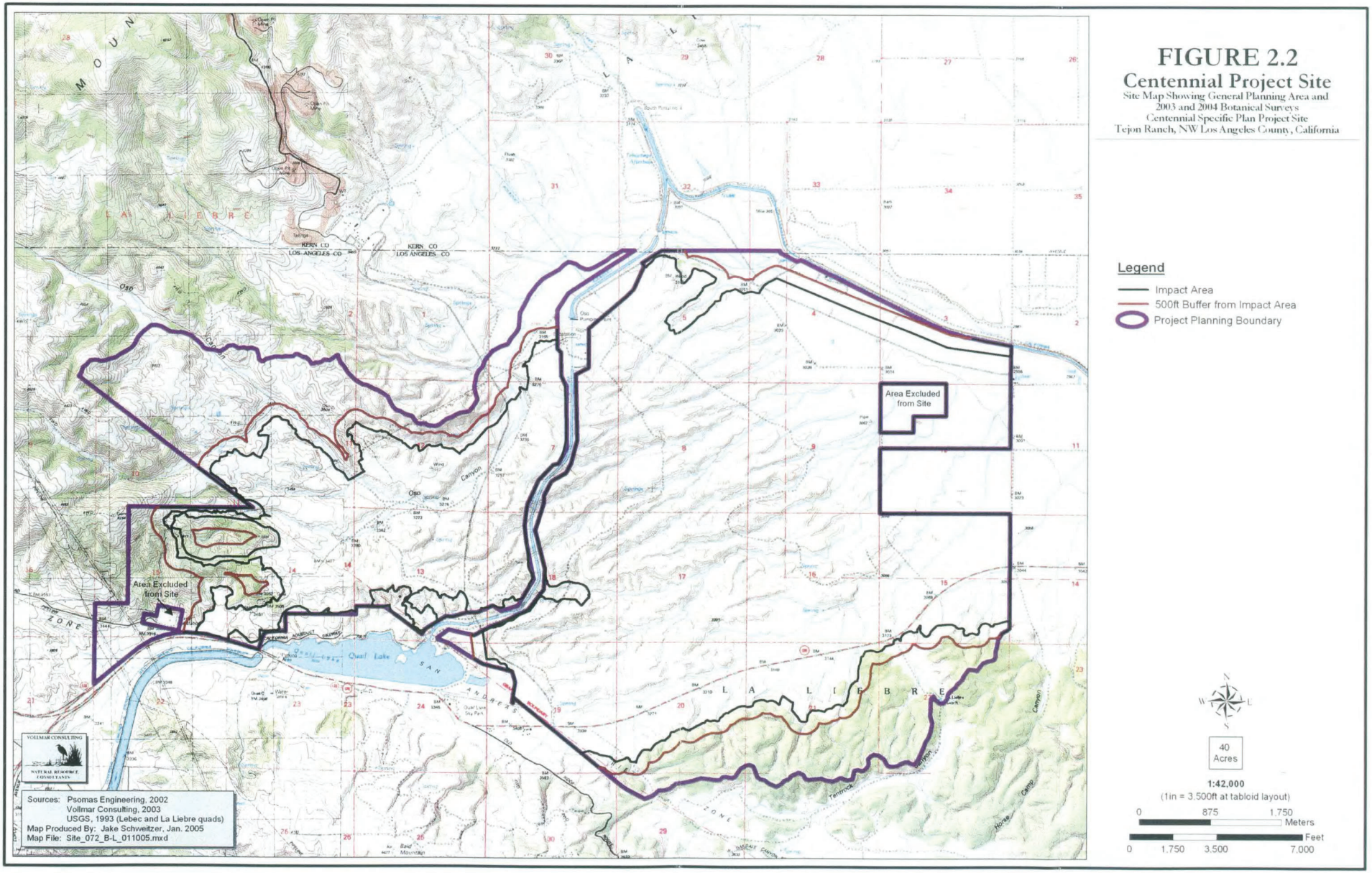

FIGURE 2.2

Centennial Project Site

Site Map Showing General Planning Area and
2003 and 2004 Botanical Surveys
Centennial Specific Plan Project Site
Tejon Ranch, NW Los Angeles County, California

3.0 LANDSCAPE SETTING

3.1 Regional Overview

The landforms that occur in and around the study area are the result of more than 300 million years of geologic deposition, uplift, and erosion combined with extensive tectonic activity. The study area is located near the junction of three distinct geographic provinces: the Mojave Desert Province to the east, the Tehachapi Range (southern tip of Sierra Nevada Province) to the north, and the Central Transverse Ranges to the south (Figure 3.1). The boundaries between these provinces are defined by California's two largest faults: the San Andreas Fault, which divides the Mohave Desert Province from the Transverse Ranges; and the Garlock Fault, which divides the Mohave Desert Province from the Tehachapi Range. Each of these provinces has a unique set of geographic, geologic, and tectonic characteristics that have strongly influenced landscape characteristics within the study area. These characteristics, in turn, strongly influence the occurrence and distribution of special-status plants and other sensitive botanical resources.

The study area is situated at the far western tip of the Mohave Desert region. This region is roughly defined by an underlying, semi-triangular geologic feature known as the Mojave Block (Figure 3.1). It begins at the junction of the San Andreas and Garlock Faults near the town of Lebec (approximately seven miles east-northeast of the study area) and expands out a couple hundred miles east towards the Colorado River. Topographically, this block is much lower than the bordering mountains. While the study area may be technically confined to the Mohave Block and the Mohave Desert region, its geology and topography have been strongly influenced by uplift, tectonic movement, and alluvial outwash from the adjacent regions. Much of the study area consists of eroded hills and terraces formed from granitic alluvium washed from the Tehachapis and Transverse Ranges during the last 100,000 years. Granite outcrops associated with the Tehachapis underlie the study area and are exposed in a few areas in the northwest corner. Sedimentary rocks derived from Tertiary Continental Deposits are exposed in the eastern study area. Sedimentary rocks deposited in a shallow marine environment and uplifted by surrounding tectonic forces are exposed in the western study area. Andesitic volcanic rock, associated with the San Andreas Fault, is exposed along the southern edge of the study area (south of Highway 138).

The Tehachapi Range, which lies to the north of the study area, is composed of intrusive granitic rock. This range is considered to be the southernmost tip of the Sierra Nevada granitic batholith. The Garlock Fault, which defines the southern boundary of the range, lies two to three mile north of the study area. There are, however, extensive granitic intrusions south of the fault related to the Tehachapis. As mentioned above, most of the study area is underlain by this granite and there are limited areas of exposed granite bedrock in the northwest corner of the study area. Also, most of the alluvium on the site was derived from weathered granite. Just north of the study area, the granite is capped by a thick layer of limestone. The limestone was originally deposited in a deep marine environment more than 300 million years ago and was subsequently uplifted by the intruding granite. While there is no limestone mapped in the study area, field surveys identified unmapped remnant blocks and exposed strata, and associated limestone-derived soils in scattered areas in the northwestern, eastern and southeastern portions of the study area. Given elevation and proximity, these rocks are likely disjunct blocks that came from the

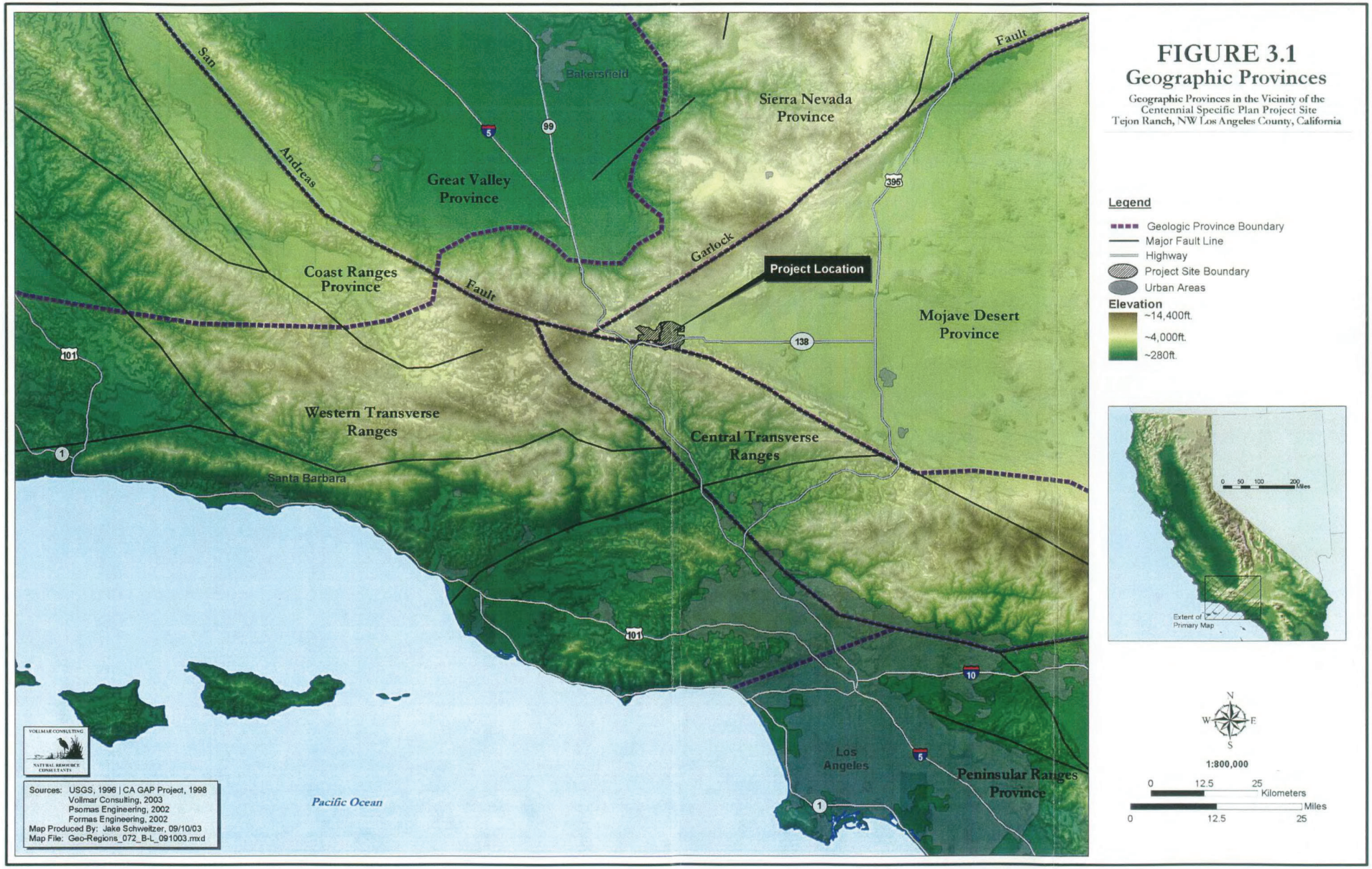

FIGURE 3.1
Geographic Provinces

Geographic Provinces in the Vicinity of the
Centennial Specific Plan Project Site
Tejon Ranch, NW Los Angeles County, California

limestone cap to the north. These blocks are situated within sedimentary formations deposited within the last 12 million years. Typical vegetation within the Tehachapi Range in the region of the study area includes intermixed chaparral, oak woodlands, and introduced annual grasslands.

The Transverse Ranges lie just south of the study area. The San Andreas Fault, which defines the northern boundary of the range, runs along Highway 138 east to Quail Lake and then cuts through the hills bordering the highway to the south. The Transverse Ranges were uplifted by compressional forces exerted by a bend in the San Andreas Fault (termed the "Big Bend"). Since the San Andreas Fault lies entirely south of the study area, the steep hills along the southern edge of the study area may be from local compression and thrusting along the northern side of the fault. The geology along these hills consists of uplifted and weathered Continental Deposits (conglomerate, sandstone, shale, and limestone), localized Purple Andesite outcrops, and Recent Alluvium along stream courses and floodplains.

3.2 Topography

The study area incorporates a section of a complex, highly dissected landscape that slopes generally to the east (Figure 3.2) with west-east running ridges, terraces, valleys, and stream courses. Within this topography, there is a distinct set of primary landscape positions including floodplains, low alluvial plains, steep south- and north-facing slopes, elevated terraces, and narrow hilltops and ridges. The richness and diversity of plant species across the site, including special-status plant species and perennial bunchgrasses vary across the study area often in relation to these landscape positions.

Elevation on the site ranges from approximately 1,400 meters (4,600 feet) in the west to approximately 900 meters (2,950 feet) in the east. The highest areas (in the west and along the far southern edge) consist of exposed bedrock and steep, rounded hills cut by stream courses. The broad central section consists of steep to moderately steep rounded hills, generally arranged as parallel ridges running west to east with intervening valleys. There are also raised table-like terraces bordering the larger stream courses. These are part of the geologic formation referred to as Terrace Deposits. The far eastern section consists of a gently sloping alluvial plain, portions of which appear to have been leveled or disked in the past for farming.

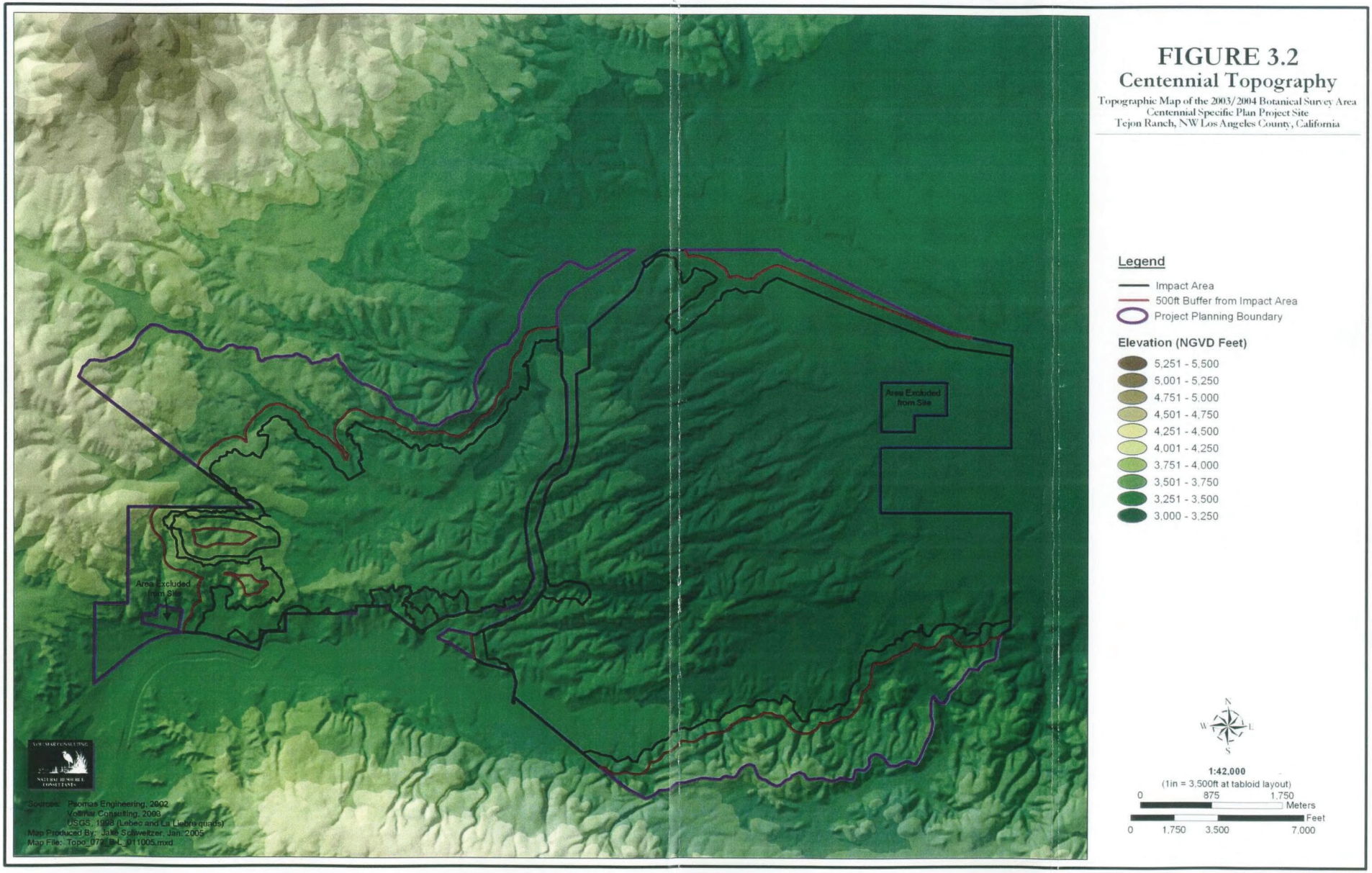

FIGURE 3.2
Centennial Topography

Topographic Map of the 2003/2004 Botanical Survey Area
Centennial Specific Plan Project Site
Tejon Ranch, NW Los Angeles County, California

3.3 Geology and Soils

Geologic formations and associated soils exert a strong influence on the occurrence and distribution of special-status plants and other sensitive botanical resources in the study area. Information on geology and soils comes from Crowell (1952), Harden (1998), Hill (1976), SCS (1970), Weise (1950), and field observations made by staff from Vollmar Consulting.

Seven distinct geologic formations occur within the study area. Six of these formations are mapped within the study area; the seventh (Limestone Beds) is mapped just north of but not within the study area. However, during field surveys, remnant limestone outcrops and blocks, and associated limestone-derived soils were identified in scattered locations in the northwestern, eastern, and southeastern portions of the study area. Table 3.1 summarizes these formations arranged by geologic age. Figure 3.3 shows the distribution of these formations within and adjacent to the study area. Table 3.2 summarizes the geologic formations and their associated soils. Figure 3.4 shows the mapped distribution of these soils in the study area.

Taken together, the geologic formations provide a rough geologic and geographic history of the region going back more than 300 million years. This history shows a beginning as a deep marine environment; followed by metamorphosis of the sea floor deposits into limestone beds; uplift of these beds by intruding Tehachapi granite; eruption of andesite volcanic flows along the young San Andreas Fault Zone; slow uplift of the area between the Tehachapis and Transverse Ranges (western Mohave Block) creating first a shallow marine or estuarine environment, followed by a mixed continental and lake environment; and, finally, the extensive disgorgement of alluvium (mostly granitic) from the Tehachapis and Transverse Ranges. These geologic formations each have distinct associated soils.

The distribution of special-status plant species and the diversity and abundance of native wildflowers and perennial bunchgrasses as well as introduced annual grasses were found to be strongly influenced by geologic formations and soils. Primary influencing factors include parent material, soil thickness, and texture. Soil pH does not appear to be a primary factor. Soil thickness varies greatly according to landscape position with thin soils along ridges, hill tops, and convex hill slopes and deeper soils along floodplains, alluvial terraces, and concave hill slopes. Soil texture is associated with the type and age of parent material. Most soils on the site are derived from granitic alluvium of the Terrace Deposits and Recent Alluvium. These sandy loam and gravelly loam soils are well-drained. Terrace Deposit soils vary from thin to deep depending on landscape position, with the thinnest soils along ridges and hilltops in the eastern study area, and the deepest soils on the elevated bench-like terraces bordering Oso Canyon. Soils of the Continental Deposits appear similar to those of the Terrace Deposits in the eastern portion of the study area with the distinct difference that the Continental Deposits have inclusions of limestone blocks rock that, upon weathering, creates an unusual friable clay loam soil. Soils of the Santa Margarita Formation tend to be thin and often overlying near-surface sedimentary bedrock. Soils derived from Tejon Lookout Granite are also thin and generally on steep slopes. The most unusual soils in the study area are those derived from limestone and andesite. The limestone-derived soils are silt or clay loams. The andesite-derived soils are sandy loams. Both of these soil types likely have unusual chemistries and available nutrients.

Table 3.1 Geologic formations present within the Centennial Specific Plan Project Site. Information compiled by Vollmar Consulting. Data sources include Crowell (1952), Harden (1998), Hill (1976), SCS (1970), and Weise (1950).

Geologic Formation	Map Codes	Rock Type	Geologic Era	Period/ Epoch	Age	Notes
Limestone Beds	ls	Recrystallized Limestone (Metamorphic)	Paleozoic	n/a	300+ my	Oldest rocks in the region; marine beds that have been metamorphosed and uplifted by granitic intrusion. There is a large mapped limestone bed capping the granitic ridge just north of the study area and unmapped disjunct blocks and soils exposed in scattered locations in the northwest of the study area.
Tejon Lookout Granite	tlg	Plutonic (Igneous)	Mesozoic	Jurassic or Cretaceous	195-70 my	Formed from intrusive granitic plutons. The formation underlies most of the study area but is exposed in only a few areas in the northwest corner. It is the predominant formation west of the study area to the San Andreas and Garlock Faults and is the source of most alluvium in the Terrace Deposits and Recent Alluvium.
Purple Andesite	Tv	Volcanic (Igneous)	Cenozoic	Tertiary/ Early Miocene (?)	26-20 my	Consists of massive purple andesite, extruded as thick flows with local dikes. The formation is along the north side of the San Andreas fault. Within the study area, there are exposed outcrops in the southeast (south of Highway 138). Stratigraphically, the formation lies on top of Tejon Lookout Granite and beneath the Santa Margarita Formation.
Santa Margarita Formation	Tsm, Tsmss, Tsmsh, Tsmcg	Marine Sandstone, Shale, and Conglomerate (Sedimentary)	Cenozoic	Tertiary/ Middle Miocene	20-15 my	Consists of interbedded sedimentary rocks deposited in a shallow marine (estuarine?) environment. This formation is mapped along hills and slopes in the southwestern and central-northern regions of the study area.
Continental Deposits	Tcd	Continental Sandstone, Siltstone, and Shale (Sedimentary)	Cenozoic	Tertiary/ Late Miocene	15-12 my	Consists of sedimentary sandstone, siltstone, and shale deposited in a continental environment (fluvial or alluvial) on top of the Santa Margarita Formation. Formation is mapped in the central, eastern and southeastern (south of Highway 138) portions of the study area. It is capped by Terrace Deposits north of Highway 138. There are scattered limestone blocks and associated weathered soils within these deposits.
Terrace Deposits	Qt	Consolidated, undeformed gravels, sands, and silts	Cenozoic	Quaternary/ Late Pleistocene	100,000 to 10,000 yrs	These deposits occur in three distinct landscape positions. In the northeast of the study area, they occur as rounded, eroded hills; in the central western portion of the study area, they occur as elevated, flat-topped benches adjacent to Oso Creek and other larger stream courses; in the western portion of the study area, they form the upper stratum of the narrow fingerlike ridges and are underlain by Continental Deposits. They are composed of poorly sorted, consolidated alluvium derived from the upstream rock (mostly granite).
Recent Alluvium	Qal	Unconsolidated gravels, sands, and silts	Cenozoic	Quaternary/ Recent	10,000 yrs to present	These deposits are widespread in low-lying valleys and floodplains in the study area, especially to the east. They consist of unconsolidated alluvium (mostly granite) deposited along present stream courses.

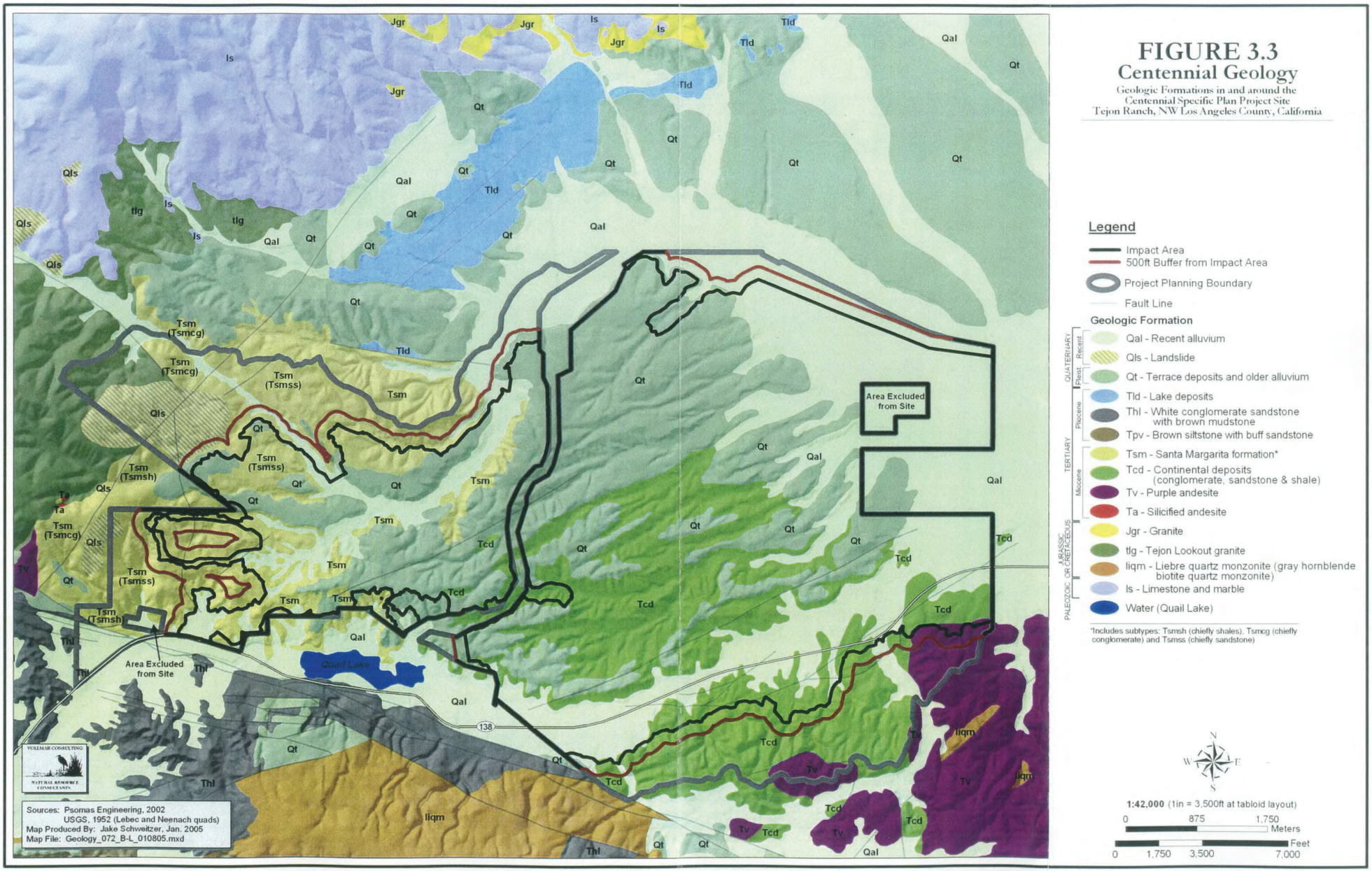

FIGURE 3.3
Centennial Geology

Geologic Formations in and around the
Centennial Specific Plan Project Site
Tejon Ranch, NW Los Angeles County, California

Legend

- Impact Area
- 500ft Buffer from Impact Area
- Project Planning Boundary
- Fault Line

Geologic Formation

QUATERNARY
- Recent
  - Qal - Recent alluvium
  - Qls - Landslide
- Pleist
  - Qt - Terrace deposits and older alluvium

TERTIARY
- Pliocene
  - Tld - Lake deposits
  - Thl - White conglomerate sandstone with brown mudstone
  - Tpv - Brown siltstone with buff sandstone
- Miocene
  - Tsm - Santa Margarita formation*
  - Tcd - Continental deposits (conglomerate, sandstone & shale)
  - Tv - Purple andesite
  - Ta - Silicified andesite

JURASSIC OR CRETACEOUS
- Jgr - Granite
- tlg - Tejon Lookout granite
- liqm - Liebre quartz monzonite (gray hornblende biotite quartz monzonite)

PALEOZOIC
- Is - Limestone and marble

- Water (Quail Lake)

*Includes subtypes: Tsmsh (chiefly shales), Tsmcg (chiefly conglomerate) and Tsmss (chiefly sandstone)

N W E S

1:42,000 (1in = 3,500ft at tabloid layout)

0 875 1,750 Meters

0 1,750 3,500 7,000 Feet

Table 3.2 Soil types and associated geologic formations on or near the Centennial Specific Plan Project Site. Information compiled by Vollmar Consulting. Data sources include Crowell (1952), NRCS (1969), SCS (1970), and Weise (1950).

Geologic Formation/Soil Series	Code	Soil Type	Parent Material
Limestone Beds			
Ayar	AyD	Ayar clay loam, 5-15% slopes	Calcareous lacustrine deposits
Lebec	LeF	Lebec rocky loam, 15-30% slopes	Limestone
Tejon Lookout Granite			
Sheridan	ShF2	Sheridan sandy loam, 30-50% slopes	Granite
Andesite Flows			
Temescal	TrF	Temescal-Rock land complex, 30-50% slopes	Purple andesite
Santa Margarita Formation (SMF) and Continental Deposits (CD)			
Gaviota (SMF and CD)	GaE2	Gaviota rocky loam, 15-30%	Hard sandstone
Gaviota (SMF)	GaF2	Gaviota rocky loam, 30-50%	Hard sandstone
Millsholm (SMF)	MhE2	Millsholm rocky loam, 15-30% slopes	Hard shale/fine-grained sandstone
Millsholm (SMF and CD)	MhF2	Millsholm rocky loam, 30-50% slopes	Hard shale/fine-grained sandstone
Terrace Deposits (TD) and Continental Deposits (CD)			
Gorman (TD)	GoD	Gorman sandy loam, 9-15% slopes	Old granitic alluvium
Gorman (TD)	GoE2	Gorman sandy loam, 15-30% slopes	Old granitic alluvium
Gorman (TD)	GoF2	Gorman sandy loam, 30-50% slopes	Old granitic alluvium
Gorman Gullied Land (TD)	GuF	Soils cut by gullies (within Gorman soils)	Old granitic alluvium
Oakdale (TD)	OaC	Oakdale sandy loam, 2-9% slopes	Old granitic alluvium
Oakdale Terrace Escarpments (TD)	TsF	Terrace escarpments (bordering Oakdale terraces)	Old granitic alluvium
Ramona (TD)	RcD	Ramona coarse sandy loam, 9-15% slopes	Old granitic alluvium
Ramona (TD and CD)	RdE2	Ramona sandy loam, 9-30% slopes	Old granitic alluvium
Ramona (CD)	ReC	Ramona gravelly loam, 2-9% slopes	Old granitic alluvium
Recent Alluvium			
Chino	Co	Chino loam, nearly level	Mixed alluvium, mostly granitic
Greenfield	GsD2	Greenfield sandy loam, 9-15% slopes, eroded	Granitic alluvium
Oak Glen	ObA	Oak Glen sandy loam, 0-2% slopes	Granitic alluvium
Oak Glen	ObC	Oak Glen sandy loam, 2-9% slopes	Granitic alluvium
Oak Glen	OcC	Oak Glen gravelly sandy loam, 2-9% slopes	Granitic alluvium
Oak Glen	OdA	Oak Glen loam, 0-2% slopes	Granitic alluvium
Oak Glen	OdC	Oak Glen loam, 2-9% slopes	Granitic alluvium
Soboba	SoB	Soboba cobbly sandy loam, 2-5% slopes	Granitic alluvium
Vernalis	VaA	Vernalis sandy loam, 0-2% slopes	Mixed alluvium, mostly granitic
Vernalis	VbA	Vernalis loam, 0-2% slopes	Mixed alluvium, mostly granitic

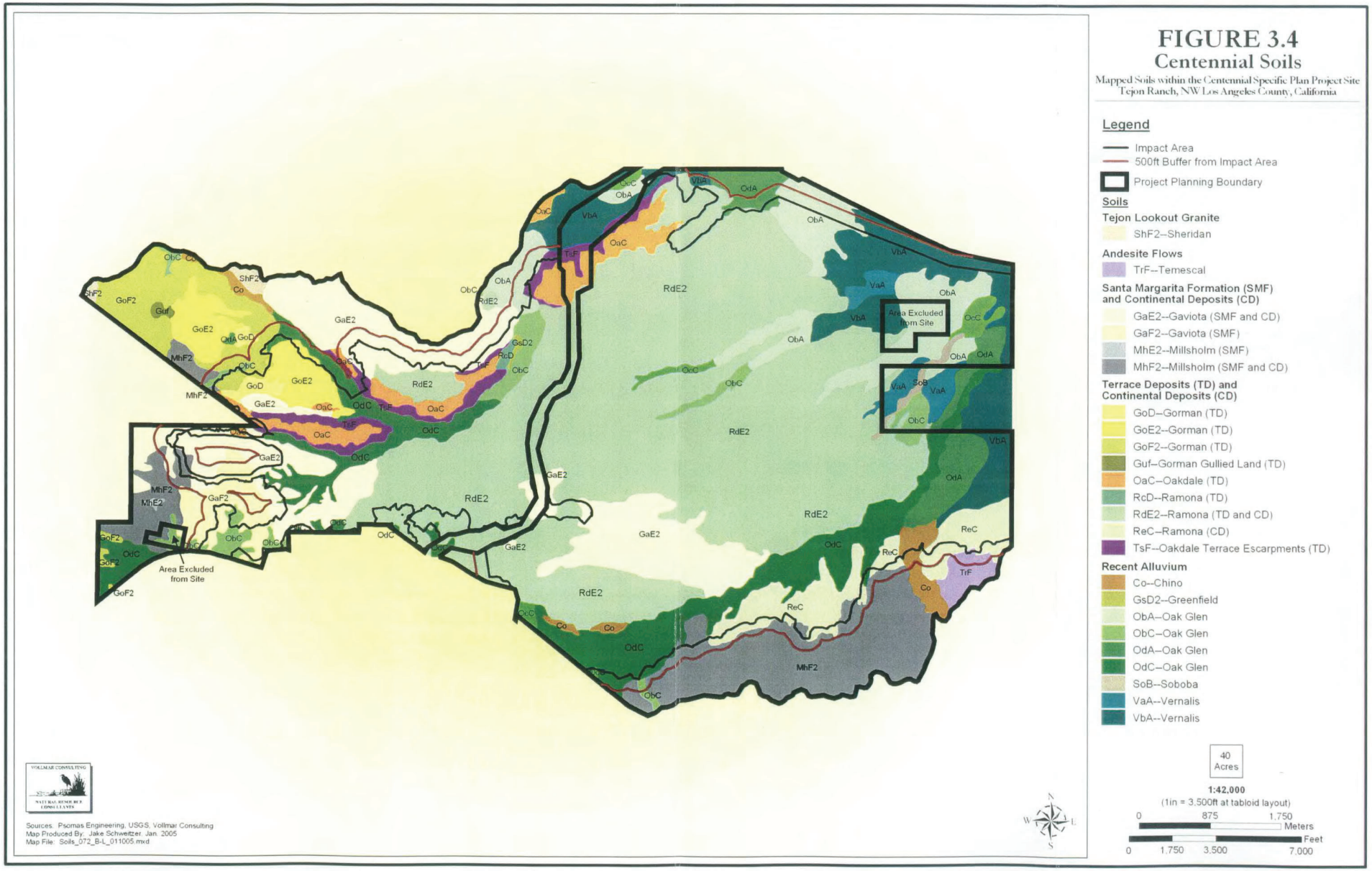
FIGURE 3.4
Centennial Soils
Mapped Soils within the Centennial Specific Plan Project Site
Tejon Ranch, NW Los Angeles County, California
Legend
Impact Area
500ft Buffer from Impact Area
Project Planning Boundary
Soils
Tejon Lookout Granite
ShF2--Sheridan
Andesite Flows
TrF--Temescal
Santa Margarita Formation (SMF) and Continental Deposits (CD)
GaE2--Gaviota (SMF and CD)
GaF2--Gaviota (SMF)
MhE2--Millsholm (SMF)
MhF2--Millsholm (SMF and CD)
Terrace Deposits (TD) and Continental Deposits (CD)
GoD--Gorman (TD)
GoE2--Gorman (TD)
GoF2--Gorman (TD)
Guf--Gorman Gullied Land (TD)
OaC--Oakdale (TD)
RcD--Ramona (TD)
RdE2--Ramona (TD and CD)
ReC--Ramona (CD)
TsF--Oakdale Terrace Escarpments (TD)
Recent Alluvium
Co--Chino
GsD2--Greenfield
ObA--Oak Glen
ObC--Oak Glen
OdA--Oak Glen
OdC--Oak Glen
SoB--Soboba
VaA--Vernalis
VbA--Vernalis
Area Excluded from Site
40 Acres
1:42,000
(1in = 3,500ft at tabloid layout)
0 875 1,750 Meters
0 1,750 3,500 7,000 Feet
Sources: Psomas Engineering, USGS, Vollmar Consulting
Map Produced By: Jake Schweitzer, Jan. 2005
Map File: Soils_072_B-L_011005.mxd

3.4 Plant Communities

Several plant communities are present in the study area. The predominant community is a combined perennial bunchgrass community/wildflower field. Additional plant community types include non-native annual grasslands and a number of oak woodland and chaparral communities. There are also limited stands of riparian woodlands, scattered freshwater marsh and alkali meadow. Although the study area occurs at the edge of the Mojave Desert region, it does not support desert (Mohavean) scrub vegetation. This is most likely related to the raised elevation and higher rainfall of the study area and its proximity to bordering ranges. Desert scrub begins to appear a mile or so east of the study area.

3.4.1 Perennial Bunchgrass Community/Wildflower Field

Native perennial bunchgrass community/wildflower field, (referred to as a "perennial bunchgrass plant community" in this report), is one of the dominant plant communities in the study area. It occurs on the weathered ridges and terraces in the central and southeastern portions of the study area primarily on Tertiary Continental Deposits and Quaternary Terrace Deposits. These ridges and terraces begin approximately a mile and half west of the aqueduct and extend east to the transition with the flat, alluvial plain and also occur south of Highway 138 on the low hills at the base of the Transverse Ranges. Perennial bunchgrasses stands occur sporadically in other portions of the study area, particularly on the Santa Margarita Formation, but they are generally smaller and are often intruded by introduced annual grasses. Perennial bunchgrasses are generally absent from floodplains, the disturbed alluvial plains to the far east, and granitic formations.

This plant community is characterized by a relatively high cover of perennial bunchgrass species (typically greater than 20%), a conspicuously low cover of non-native annual grasses, and prominent open spaces between the individual bunchgrass clumps that support a showy, diverse array of native wildflowers during favorable rain years. Four perennial bunchgrass species occur in the study area as a common component of the bunchgrass community. These include nodding needlegrass (*Nasella cernua*), one-sided bluegrass (*Poa secunda* ssp. *secunda*), desert needlegrass (*Acnatherum speciosum)*, and big squirreltail (*Elymus multisetus*). Two other native perennial bunchgrasses, small-flowered melic grass (*Melica imperfecta*) and giant wild rye (*Leymus condensatus*), occur on the site but neither is a significant component of the perennial bunchgrass community. Small-flowered melic grass occurs primarily on rocky substrates in the southeastern and western portions of the study area. Giant wild rye occurs in a few scattered areas near seeps and along small drainages. Native wildflowers were especially conspicuous during the 2003 field season which had higher than average rainfall including late spring rains which extended the growing season. During this season, more than 70 species of native wildflowers were identified within the area occupied by the perennial bunchgrass community.

This plant community was identified during 2003 surveys as an herbaceous community, and the 2003 report describes the community as "dominated by a mix of native and non-native forbs and native perennial bunchgrasses." The perennial bunchgrass component appeared sub-dominant to the wildflower component during 2003 surveys because of the extraordinary 2003 spring wildflower display related to the above average 2002/2003 rainfall. Our continued plant

community study, following the below average rainfall of 2003/2004, however, demonstrated that this community is indeed dominated by perennial bunchgrass species with a conspicuous wildflower component and an unusual lack of introduced annual grass species. Quite frankly, we have rarely seen extensive intact perennial bunchgrass stands of this nature, and it required a second year, with the wildflower component absent, to recognize the habitat as a perennial bunchgrass community.

Section 5.0 presents the methods and results of an ecological study of the perennial bunchgrass community that occurs over much of the study area. This plant community has a relatively high cover of native perennial bunchgrasses and wildflowers, and a conspicuously low cover of introduced annual grasses. Historically, this community type occurred throughout interior lowland California but was almost entirely replaced by invasive annual grasses introduced during Europeans settlement. This study assessed the diversity and variation in cover of perennial bunchgrass species, wildflowers, and introduced annual grasses across different landscape positions. The study also compared the bunchgrass community on the site with other known occurrences in the region and across the state. The results can be used to assess potential impacts of the proposed project to this unique native perennial bunchgrass community.

Historically, the perennial bunchgrass community type occurred throughout much of interior lowland California. It is generally agreed that this community was once common on nearly all well-drained upland sites throughout this area. However, the community has been almost entirely out-competed and replaced by invasive annual grasses introduced during Europeans settlement (Heady, 1995). It is estimated that less than 1% of the original bunchgrass community remains. The remaining stands are generally small (less than 100 acres), isolated in widely scattered areas throughout the state, and often intruded by introduced annual grasses. Given its dramatic decline, the perennial bunchgrass community is considered a sensitive plant community type in California (and other western states). The State of California also considers areas with conspicuous native wildflower displays to be a sensitive plant community called a wildflower field (Holland, 1986; CNDDB, 2004).

The perennial bunchgrass community on the site occupies roughly 5,500 acres within the entire 9,542-acre study area. The occurrence of such a large, intact stand is unusual and significant from both a regional and statewide perspective. Its ecological value is further enhanced by the co-occurrence of four different bunchgrass species, the conspicuously low cover of introduced annual grasses, and the strong and diverse association of native wildflowers. Section 5.0 provides a thorough assessment of this plant community regarding habitat preferences, distribution and variations in species composition and cover within the study area, regional landscape factors causing the local occurrence of this community, and comparisons with other known perennial grassland stands in the region and statewide.

3.4.2 Introduced Annual Grasslands

Non-native annual grassland is dominant in certain portions of the study area including the hills in the northwestern and western portions of the study area, on disturbed alluvial plains in the far eastern portion of the study area, and along the flood plains and lower slope positions between the ridges in the central study area. The annual grasses typically dominate on the relatively

deeper soils associated with these landscape positions. Non-native annual grasslands also occur in a mosaic pattern within the oak woodland and chaparral communities that occur on the hills in the west and south, and in the far northwestern portions of the study area. The annual grassland community is dominated by a mix of exotic annual grass species. It also includes a low to moderate cover of native and exotic forbs (wildflowers). Common species in this plant community include slender oat grass *(Avena barbata),* red brome *(Bromus madritensis ssp. rubens)*, ripgut brome *(Bromus diandrus)* and redstem filaree *(Erodium cicutarium).*

3.4.3 Oak Woodlands

Five different oak species occur on the site including (in order of abundance) blue oak (*Quercus douglasii*), Tucker oak (*Quercus john-tuckeri*), valley oak (*Quercus lobata*), canyon live oak (*Quercus chrysolepis*), and interior live oak (*Quercus wislizenii* var. *frutescens*). Coast live oak (*Quercus agrifolia*), mistakenly reported from the site by a previous consultant, does not occur. Blue oak and Tucker oak woodland occurs throughout most of the higher hills in the northwest, southwest, and southeast portions of the site. These two oak woodlands are intermixed in some areas. Valley oak woodland occurs in scattered areas on floodplains along the larger stream courses in the study area. Many of the valley oaks are very large and mature. Individual trees and small stands of canyon live oak occur in scattered areas along protected, steep north- and east- facing slopes in the far western study area. One interior live oak was found on a sandstone hillside in the southwest of the study area.

3.4.4 Chaparral

Scrub and chaparral habitats occur on steeper, often rocky slopes and outcrops in the southern and western portions of the study area. In general, it is difficult to categorize these according to a specific plant community. Since the study area is located near the intersection of three distinct geographic provinces (Mojave Desert, Tehachapi Range, and Transverse Ranges), many of the scrub and chaparral communities on the site have a mix of species from more than one plant community type as defined by Holland (1986). Represented communities include Mojave Mixed Woody Scrub, Big Sagebrush Scrub, Rabbitbrush Scrub, and Semi-Desert Chaparral. Rabbitbrush Scrub and Big Sagebrush Scrub occur as distinct communities in scattered areas on the low-lying alluvial plains in the eastern portion of the study area.

3.4.5 Other Plant Community Types

There are other minor plant communities present in the study area. Alkali Meadow occurs in a low-lying area northeast of the intersection of Highway 138 and Cement Plant Road. This area may be an old borrow site. There are also local stands of Southern Cottonwood-Willow Riparian Forest along the two largest stream courses on the site, and Coastal and Valley Freshwater Marsh in a few scattered areas along these streams and in a few spring-fed stock ponds.

3.5 Land Use

Ranching and hunting are the primary land uses within the study area. Development is limited to unpaved ranch roads, fencing, stock ponds, a few electrical transmissions lines, and some

buildings used as hunting cabins. The far eastern end of the study area appears to have been leveled and disked in the past for farming. While excluded from the actual study area, the California Aqueduct and several paved roads (including Highway 138 and access roads to the aqueduct and a cement plant located just north of the study area) traverse the study area. Surrounding lands are used primarily for ranching and hunting though there are some farmed parcels and rural residences. Quail Lake is located along the southern edge of the study area and there is an electrical substation just southwest of the study area.

4.0 SPECIAL-STATUS PLANT SURVEYS

4.1 Introduction

This section of the report summarizes the methods and results of special-status plant surveys conducted during spring and summer 2003 and 2004 throughout the study area. The purpose of the surveys was to identify occurrences of special-status species. In addition, the surveys assessed the specific microhabitat requirements of targeted special-status species through review of available site information (as summarized in Section 3.0 above), field visits to known locations in the project vicinity, and site field observations. This assessment was used to interpret the extent of potential habitat for targeted species across the study area.

The surveys conducted for this report were comprehensive in nature but do not represent complete present/absence surveys given the size of the study area and the size of the area surveyed each day by the field crew. However, they were systematic and intensive and it is likely that all special-status plant species present within the study area were detected and that nearly all occurrences of these species were identified and mapped. Two special-status species identified on the site, sylvan microseris (*Microseris sylvatica*) and Tucker oak (*Quercus john-tuckeri*), were quite abundant and high potential habitat areas rather than individual occurrences were mapped.

The survey results may be used for specific project planning and permitting. An additional round of peak spring surveys and precise mapping of sylvan microseris and Tucker oak stands would be required to achieve full presence/absence survey results. It is unclear, however, if these additional surveys would be required to obtain project permits.

4.2 Methods

4.2.1 Background Review

Prior to the 2003 field surveys, the project team gathered and reviewed available botanical information and developed an annotated list of special-status plants known to occur, or with potential to occur, in the study area. The list was modified for the 2004 surveys according to new information obtained during the 2003 surveys. Sources used to develop this information included California Native Plant Society's (CNPS) Inventory of Rare and Endangered Vascular Plants of California (CNPS 2001), California Department of Fish and Game's (CDFG) California Natural Diversity Data Base (CNDDB 2003), A Flora of Kern County, California (Twisselman, 1967), a list previously developed for the study area by Impact Sciences, Inc., and discussions with Maynard Moe, an expert botanist familiar with the region (Moe 2003).

For the purposes of this report, special-status species include:

- species listed or proposed for listing by the federal government as threatened or endangered under the Federal Endangered Species Act (ESA) (50 CFR 17.12) and federal species of concern;
- species listed or proposed for listing by the State of California as rare, threatened, or endangered under the California Endangered Species Act (CESA) (14 Cal. Adm. Code 670.5) and state species of special concern;
- species identified in California Native Plant Society's Inventory of Rare and Endangered Vascular Plants of California (CNPS 2001) as rare, threatened, or endangered in California (Lists 1 and 2), or on the review or watch lists (Lists 3 and 4, respectively);
- species that meet the definition of rare, threatened, or endangered under the California Environmental Quality Act (CEQA).

Table 4.1 is an annotated list of the special-status identified as known or with potential to occur in the study area.

The project team also gathered and reviewed information on the study area landscape features including geology, geomorphology and topography. Sources of information included geologic maps and books, and soils surveys pertaining to the region (Crowell (1952), Harden (1998), Hill (1976) and SCS (1970), as well as books or reports discussing the regional landscape setting and habitats (Twisselman, 1976; Holland, 1986). Impact Sciences, Inc. also provided the team with an aerial photo and topographic map of the study area. Mr. Schweitzer, the project GIS technician, developed a digital topographic map of the study area using a digital elevation model (DEM).

4.2.2 Field Surveys

The field survey teams consisted of two senior botanists and two to three assistant botanists. During the 2003 surveys, John Vollmar and John Hale served as senior botanists, and Vir McCoy, Michele Disney, and Shannon Hickey served as assistant botanists. During the 2004 surveys John Vollmar and Jon Kelsey served as senior botanists and Shannon Hickey, Gretchen Vos and Vir McCoy served as assistant botanists. Surveys were conducted by two teams working different areas. Each team consisted of one senior botanist and one or two assistant botanists. During surveys, each botanist worked independently. However, all botanists carried field radios so that any questions pertaining to plant taxonomy or other issues could be immediately addressed in the field by the senior botanist on the team. ATVs were used to access the study area and to conduct the reconnaissance-level surveys. More intensive surveys were conducted on foot in areas with potential to support special-status species or areas which could not be accessed by ATVs.

Prior to conducting site surveys, the team conducted regional status surveys of known special-status species occurrences to become familiar with microhabitats, plant associates, and current phenology. Status surveys were conducted in the adjacent interior Coast Ranges, around Fort Tejon, along the low foothills and plains bordering the southern San Joaquin Valley to the south and east, in the hills east of the study area, and in the western Antelope Valley surrounding hills.

Table 4.1. Special-status plant species known to occur in the general region of the Centennial Specific Plan Project Site, Tejon Ranch, northwestern Los Angeles County.[1] Prepared March 2004 by Vollmar Consulting (Berkeley, CA).

SCIENTIFIC NAME/ COMMON NAME[2]	STATUS[3]	HABITAT/RANGE/ELEVATION	REGIONAL OCCURRENCE	BLOOM PERIOD
Chorizanthe spinosa Mojave spineflower	CNPS 4	Chenopod scrub, Joshua tree woodland, Mohavean scrub; known only from Kern, Los Angeles, and San Bernadino Counties; 6-1300 meters.	No records in the project vicinity prior to survey.	Apr-Jul
Eriophyllum lanatum var. *hallii* Fort Tejon wooly sunflower	CNPS 1B	Slopes in chaparral, oak woodland; known only from Kern and Santa Barbara Counties; 1065-1500 meters.	Known from a few sites north of the study area in the canyon west of Fort Tejon State Park and on Tejon Ranch east of I-5.	May-Jul
Erodium macrophyllum Round-leaved filaree	CNPS 2	Friable clay soils in valley and foothill grassland, oak woodland; known from scattered locations throughout the central and southern Coast Ranges, Great Valley, and Sierra Foothills; 15-1200 meters.	Known from three sites in a localized area just north of the study area on Tejon Ranch; reported by Twisselman (1967) along the northern foothills of the Tehachapi Mtns and along the NW side of Antelope Valley.	Mar-May
Eschscholzia lemmonii ssp. *kernensis* Tejon poppy	CNPS 1B	Heavy clay soils in valley and foothill grassland, chenopod scrub; known only from Kern County in the hills south of Bakersfield and the Tejon Pass region; 160-1000 meters.	Known from Comanche Point (hills along the SE edge of the San Joaquin Valley) and in the canyon west of Fort Tejon State Park.	Mar-May
Githopsis tenella Delicate bluecup	CNPS 1B	Mesic sites in chaparral, woodland habitats; known only from Kern and Tulare Counties in the Sierra Nevada and Tehachapi Mountains, and (possibly) Monterey County; 1100-1900 meters.	Reported by Twisselman along Purdy Ridge in the Tehachapi Mountains several miles NE of the study area.	May-Jun
Layia leucopappa Comanche Point layia	CNPS 1B	Vernally wet, usually whitish clay soils (small flats on slopes) in valley and foothill grassland, chenopod scrub; known only from Kern County near the Comanche Hills and Tejon Hills (Twisselman, 1967); 100-350 meters.	Known from Comanche Point and the Tejon Hills several miles NE of the study area.	Mar-Apr
Microseris sylvatica Sylvan microseris	CNPS 4	Thin, gravelly soils in valley and foothill grassland, woodland, Great Basin scrub; known from scattered locations throughout the central and southern Coast Ranges and the Sierra Nevada foothills; 45-1500 meters.	No records in the project vicinity prior to this survey.	Mar-Jun
Monardella linoides ssp. *oblonga* Flax-like monardella	CNPS 1B	Montane coniferous forest, pinyon/juniper woodland; known only from mountainous areas in Kern, Tulare and Venture Counties; 900-2470 meters.	Known occurrence a few miles NW of the study area below Chuchupate Campground, south of Fort Tejon State Park.	Jun-Aug
Navarretia setiloba Piute Mountains navarretia	CNPS 1B	Clay or gravelly loam soils in oak woodland, pinyon/juniper woodland, valley and foothill grassland; known from fewer than ten sites in the SW Tehachapi Mountains (Kern and Tulare Counties); 305-2100 meters.	Reported by Twisselman from Grasshopper flat, in the Tehachapi foothills bordering the San Joaquin Valley, several miles north of the study area.	Apr-Jul
Opuntia basilaris var. *treleasei* Bakersfield cactus	CE/FT CNPS 1B	Sandy or gravelly soils on alluvial benches and fans along the south and SE edge of the San Joaquin Valley in valley and foothill grassland, chenopod scrub, oak woodland; known only from Kern County; 120-550 meters.	Known from the base of the Tehachapis just west of I-5 (several miles NW of the study area) and from Comanche Point (several miles NE of the study area).	May

SCIENTIFIC NAME/ COMMON NAME[2]	STATUS[3]	HABITAT/RANGE/ELEVATION	REGIONAL OCCURRENCE	BLOOM PERIOD
Quercus john-tuckeri Tucker oak	CNPS 4	Arid oak woodlands, pinyon/juniper woodlands, chaparral and slopes on desert borders. Known to occur on the east slope of the Tehachapis, the northern slope of the Western Transverse Range, the northern slope of the San Gabriel Mountains, and the interior South Coast Range; 900 – 2,000 meters.	Reported by Twisselman in Kern County from the San Emgdio and Temblor ranges, southwest to the north flank of Mt. Abel, and occasionally northeast through the Piute Mountains to Erskine Canyon. Also on the arid slopes in the northeastern Tehachapi Mountains in the Cache Peak, Weldon Peak and upper Pine Tree Canyon.	Mar-May
Perideridia pringlei Adobe yampah	CNPS 4	Often on clay or serpentine soils in chaparral, woodland, coastal scrub, and pinyon/juniper woodland; known from the central and southern Coast Ranges and the southern Sierra foothills; 300-1,800 meters.	Known from Kern and Los Angeles Counties but not previously reported in the immediate vicinity of the project site.	Apr-June
Syntrichopappus lemmonii Lemmon's syntrichopappus	CNPS 4	Sandy and gravelly slopes in chaparral and Joshua tree woodlands, on the SW border of Mojave Desert and adjoining slopes of the San Gabriel, San Jacinto and San Bernardino Mountains. Also in Monterey County; 900-1500 meters.	Known from Los Angeles, San Bernardino and Monterey Counties but not previously reported in the immediate vicinity of the project site.	Apr-May
Thermopsis macrophylla var. *argentata* Silvery false lupine	CNPS 1B	Slopes in woodland, valley and foothill grassland, lower coniferous forest; Known from widely scattered locations in California (southern Coast Range, Tehachapis, northern Sierra Nevada, southern Cascades); 900-1960 meters; synonymous with *Thermopsis californica* var. *argentata* (CNPS 2001).	Known from occurrences just north of the study area near the Cement Plant and several miles to the north, east of Tejon Lake.	Apr-Jul

1. Sources of information include California Department of Fish and Game's California Natural Diversity Data Base (CNDDB 2001), California Native Plant Society's Inventory of Rare and Endangered Vascular Plants of California (CNPS 2001), A Flora of Kern County (Twisselman, 1967), The Jepson Manual (Hickman, 1993), A California Flora (1968), special-status species lists and technical reports previously prepared for the site by Impact Sciences, Inc. (Oakland, CA), and discussions with knowledgable experts.
2. Scientific nomenclature from Hickman (1993); common names from CNPS (2001).
3. Federal Status: FT = Federal Threatened; State Status: CE = California Endangered; CT = State Threatened; CNPS 1B = plants rare, threatened or endangered over entire range; CNPS 2 = plants rare, threatened or endangered in California but more common elsewhere; CNPS 4 = watch list of plants that are uncommon but not currently rare, threatened or endangered

The teams conducted two rounds of surveys each year, the first during the peak spring flowering period and the second during the late spring flowering period. Surveys covered the entire survey area during each round. During the 2003 surveys, the first round was conducted April 1-11, and the second round was conducted June 23-27. During 2004, the first round was conducted April 15-24, and the second was conducted June 10-13.

Survey intensity (number of acres surveyed per person per day) differed within a given area, according to terrain and accessibility, and between years as the 2004 surveys were intended to augment 2003 survey data. Table 4.2 summarizes survey intensity by survey area and year.

Table 4.2. Comparison of survey intensities during the 2003 and 2004 botanical surveys on the Centennial Specific Plan Project Site, Tejon Ranch, Los Angeles County, California.

Centennial Project Survey Areas	Survey Intensity (Acres Surveyed/Person/Day)			
	2003 Peak Spring Surveys	2003 Late Spring Surveys	2004 Peak Spring Surveys	2004 Late Spring Surveys
Eastern Area (flat-moderate)	320 acres	640 acres	640 acres	640 acres
Western Area (steep or rocky)	160 acres	320 acres	640 acres	640 acres

At the beginning of each survey day, each team identified a targeted survey area. Team members then communicated during the course of the day, dividing the survey area into smaller blocks and conducting focused surveys. After a particular block was surveyed, it was marked off on a field map. In this way, the team could track survey progress and avoid missing or resurveying areas.

Surveys were floristic in nature whereby all plants encountered were identified to species (or subspecies/variety as appropriate). During surveys, each botanist used a notebook to record all species observed. Species that could not be readily identified in the field were collected and identified in the evening using botanical field manuals. During the 2003 surveys, John Hale kept a master list of all species observed, adding any new species identified at the end of each field day. During 2004, Gretchen Vos maintained and updated the master species list.

Each occurrence of a special-status species identified during the surveys was assigned a unique number. The boundary of each occurrence was mapped using a professional GPS unit with meter accuracy (GeoXT). Ecological data were collected following the form from the California Natural Diversity Data Base. Voucher specimens were collected for each of the special-status species found in the study area. Pictures were also taken of all special-status species except Lemmon's syntrichopappus (*Syntrichopappus lemmonii*) and Tucker Oak (*Quercus john-tuckeri*).

4.2.3 Mapping and Analysis

GPS field data were downloaded into a GIS data base for mapping and analysis. All data were differentially corrected to improve accuracy. These data were then used to create maps showing distribution of mapped special-status plant occurrences in relation to study area features including topography, plant communities, and geology.

4.3 Results

Seven special-status plant species were identified within the study area:

- Mojave spineflower (*Chorizanthe spinosa*)
- Round-leaved filaree (*Erodium macrophyllum*)
- Sylvan microseris (*Microseris sylvatica*)
- Piute Mountains navarretia (*Navarretia setiloba)*
- Adobe yampah (*Perideridia pringlei*)
- Tucker oak (*Quercus john-tuckeri)*
- Lemmon's syntrichopappus (*Syntrichopappus lemmonii*)

The occurrence, distribution, and microhabitats for each of these species are discussed below. Table 4.3 summarizes the number of occurrences and area of each species stratified by impact and non-impact areas within the project site. Figures 4.1, 4.2, 4.3, 4.4a and 4.4b show the occurrences of each species in relation to site geography (USGS topographic map), aerial photography, and geology, respectively. Appendix B provides photographs of five of the seven special-status species. Photos of Lemmon's syntrichopappus (*Syntrichopappus lemmonii*) and Tucker oak (*Quercus john-tuckeri)* are not included.

4.3.1 Overview of Plant Diversity in the Study Area

A total of 255 plant taxa were identified in the study area (see list in Appendix 4-B). Of these, 222 (87%) were natives and 33 (13%) were non-natives. The perennial bunchgrass plant community, which dominates in the central and southeastern portions of the project site, supports a diverse mix of native wildflowers and perennial bunchgrasses. There is also a strong cover of filaree (*Erodium cicutarium*), a common non-native rangeland forb. Overall, the study area is relatively free of invasive or noxious weeds, except in the low-lying alluvial plains in the far eastern study area. Past farming on portions of these plains degraded the habitat and facilitated invasion by non-native weeds such as tansy mustard (*Descurania sophia*) and summer mustard (*Hirshfeldia incana*). The woodland and chaparral communities in the western and southern study area contribute important unique elements to the plant diversity in the study area, as do the alkali meadow, riparian and freshwater marsh communities.

Table 4.3 Summary of special-status plant occurrences identified during 2003 and 2004 botanical surveys conducted by Vollmar Consulting on the Centennial Specific Plan Project Site, Tejon Ranch, Los Angeles County.

	Total Study Area							Inside Impact Areas		Inside Impact Buffer		Outside Impact, Inside Project Planning		Outside Project Planning Boundary	
Species[1]	Total Number of Occurrences[2]	Number of Occurrences[2] Identified in 2003	Number of Occurrences[2] Identified in 2004	Total Acreage	Max. Occurrence Size (Acres)	Min. Occurrence Size (Acres)	Average Occurrence Size (Acres)	Number of Occurrences[2]	Total Acreage	Number of Occurrences[2]	Total Acreage	Number of Occurrences[2]	Total Acreage	Number of Occurrences[2]	Total Acreage
CHSP	19	10	9	0.62	0.29	.001	0.03	20	0.62	0	0.0	0	0.0	0	0.0
ERMA	46	32	14	46.92	12.9	.004	1.02	38	25.76	6	5.76	5	9.15	6	6.24
MISY[3]	N/A	N/A	N/A	4,458	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NASE	3	0	3	1.79	1.55	.038	0.60	0	0.0	3	0.83	1	0.97	0	0.0
PEPR	1	0	1	0.02	0.02	0.02	0.02	1	0.02	0	0.0	0	0.0	0	0.0
QUJO[3]	N/A	N/A	N/A	1,420	N/A	N/A	N/A	N/A	73	N/A	399	N/A	948	N/A	N/A
SYLE	1	0	1	0.013	.013	.013	.013	0	0.0	1	.013	0	0.0	0	0.0
All Species				5,927											

Notes:[1] CHSP = *Chorizanthe spinosa;* ERMA = *Erodium macrophyllum;* MISY = *Microseris sylvatica;* NASE = *Navarretia setiloba;* PEPR = *Perideridia pringlei;* QUJO = *Quercus john-tuckeri;* and SYLE = *Syntrichopappus lemmonii.* [2]Note that the total number of occurrences may be less than the number of occurrences shown in the other columns. This is due to the fact that some occurrences crossed the boundaries between impact and non-impact areas and were counted in two different areas. [3]The total number of *occurrences* for *Microseris sylvatica* and *Quercus john-tuckeri* were not calculated, as numerous occurrences of both species were located over extensive areas in the study area.

4.3.2 Special-Status Plants

4.3.2.1 Mojave Spineflower *(Chorizanthe spinosa)*

Listing Status: CNPS List 4; no state or federal status

Mojave spineflower is a prostrate to ascending annual forb in the buckwheat family (Polygonaceae). It has small white flowers surrounded by spine-tipped bracts (see photographs in Appendix 4-A). It typically occurs in chenopod scrub, Joshua tree woodland, Mohavean scrub habitats well east of the study area. It is known only from Kern, Los Angeles, and San Bernardino Counties and, prior to these surveys, was not known from the vicinity of the study area. It is a CNPS List 4 species (watch list) and has no state or federal listing status.

A total of nineteen occurrences of Mojave spineflower were located in the study area. The 2003 surveys identified ten locations, in two separate clusters, along alluvial slopes near the central

southern edge of the study area. Nine additional occurrences, in four clusters, were identified during the 2004 surveys. These additional occurrences were all located either adjacent to the previous 2003 occurrences or within the same localized habitat. (Figures 4.1 and 4.2).

The microhabitat occupied by the species is highly specialized. First, the occurrences were situated along two finger-like corridors of Recent Alluvium bordered by much older Continental Deposits which included limestone blocks and, further up the hill slope to the south, a large andesite outcrop (Figures 4.3 and 4.4a). Due to this complex geologic setting, the soils in and around the Mojave spineflower locations were unique, consisting in large part of mixed andesitic and limestone alluvium. Together, these two types of alluvium undoubtedly create a soil with a unique chemistry and texture.

Second, all mapped locations were within eroded soil barrens. In these barrens, the top one to two inches of soil had been stripped away through erosion, leaving a very thin mineral soil as the top horizon. These barrens occurred in scattered locations along the Recent Alluvium surface. Most of these barrens were colonized by a dense stand of Mohave spineflower. Subdominant associated species within the barrens included California goldfields (*Lasthenia californica)*, red brome *(Bromus madritensis* ssp. *rubens)*, one-sided bluestem *(Poa secunda* ssp. *seconda)*, vinegar weed (*Trichostemma lanceolatum)*, and turkey mullein (*Eremocarpus setigerus)*. The surrounding hillsides supported the perennial bunchgrass plant community described elsewhere in this report.

Given the highly specialized microhabitat conditions associated with the Mojave spineflower occurrences, especially its association with mixed andesite and limestone alluvia, it is assumed this species would only occur along the southern edge of the study area (south of Highway 138), immediately below an exposed andesite outcrop. No occurrences of the species were found elsewhere in this localized area even though there are extensive andesite outcrops to the east. The species is not expected to occur elsewhere in the study area (i.e. north of Highway 138) due to a lack of suitable habitat.

4.3.2.2 Round-leaved Filaree (*Erodium macrophyllum*)

Listing Status: CNPS List 2; no state or federal listing status

Round-leaved filaree is a low-growing annual or biennial forb in the geranium family (Geraniaceae). It has reniform (kidney-shaped) leaves and inconspicuous white to pink-tinged flowers (see photographs in Appendix 4-A). The species is uncommon but widely distributed throughout the central and southern Coast Ranges, southern Sierra Nevada, and Great Valley regions of California. Round-leaved filaree is a CNPS List 2 species, meaning it is rare in California but more common elsewhere. It has no state or federal listing status.

The surveys identified a total of forty-six occurrences of round-leaved filaree. Thirty-two occurrences were found during 2003 surveys. Fourteen additional occurrences were identified during 2004 surveys. The additional 2004 occurrences were located near the 2003 occurrences on the slopes and flats below the hills south of Highway 138. All occurrences are mapped on Figures 4.1 and 4.2. Population size among occurrences ranged from small occurrences covering

less than forty square feet and supporting fewer than 20 plants to large occurrences covering several acres and supporting several thousand plants. Most occurrences were found along the low hills and slopes south of Highway 138. The remaining occurrences were located in a localized area on the dissected terraces north of Highway 138 and east of the California Aqueduct. During 2003 surveys several additional occurrences were also found outside of the study area, just north of the study area in upper Oso Canyon and east of the cement plant. The eight occurrences east of upper Oso Canyon were mapped and are shown on the report figures.

The distribution of round-leaved filaree is strongly influenced by site geology (Figures 4.3 and 4.4a). Round-leaved filaree is typically associated with friable clay loam soils. At the beginning of the 2003 surveys, it seemed unlikely this species would be found in the study area since none of the associated geologic formations weather into clay soils except perhaps for shale of the Santa Margarita Formation. However, once the surveys began, unmapped limestone outcrops and soils were found in scattered, isolated locations across in the central and southeastern portions of the study area. Also, limestone outcrops and limestone-derived soils were found in the steep hills in the northwest study area along upper Oso Canyon. The soils derived from these limestone deposits are unusual friable clay loam soils that were found to provide suitable habitat for round-leaved filaree. All occurrences of this species within the study area were directly associated with these soils as evidenced by the presence of limestone fragments in the soils and, in some cases, nearby limestone outcrops. The limestone apparently comes from two different sources. The limestone in the northwestern of the study area, mapped as Terrace Deposits, likely comes from remnant blocks or buried layers associated with the Limestone Beds capping the ridges to the north of the study area. The limestone in the central and southeastern portions of the study area come from either remnant limestone blocks deposited as part of the alluvium within Continental Deposits or from lake-deposited calcareous rock integral to the Continental Deposits. Though not mapped within the study area, there is a geologic stratum closely associated with the Continental Deposits called Lake Deposits. One component of these Lake Deposits is 'marl', a sedimentary rock type derived from mixed clay and microcrystalline limestone. Significantly, this rock weathers into a friable clay loam.

Interestingly, in an area south of Highway 138, round-leaved filaree alternated with Mojave spineflower across alternating geologic surfaces. Round-leaved filaree was on mapped Continental Deposits while Mojave spineflower was mapped on intervening fingers of Recent Alluvium composed of mixed andesite and limestone alluvia (discussed above).

From a topographic perspective, round-leaved filaree typically occurs on moderate to steep slopes on a variety of aspects. The apparent strong association of round-leaved filaree with moderate to steep slopes appears to be related more to the location of the limestone soils, rather than any specific preference for these slopes. There did not appear to be any unique hydrologic conditions other than the fact that clay soils retain more water and remain moister longer than the surrounding granite- and sedimentary-derived soils.

Most occurrences of the species were located in annual grassland inclusions within the perennial bunchgrass plant community. A few were in openings within blue oak or Tucker oak woodlands. All occurrences had a unique suite of plant associates, many of which were also exclusively found on limestone-derived soils. Common associates included lanceolate

monolopia (*Monolopia lanceolata)*, ciliate phacelia (*Phacelia ciliata)*, peppergrass (*Lepidium nitidum)*, miner's lettuce (*Claytonia perfoliata)*, blue dicks (*Dichelostemma capitata)*, and tidytips (*Layia platyglossa)*. One occurrence had common lomatium (*Lomatium utriculatum)* as a dominant associate. The associates proved very useful in finding occurrences of round-leaved filaree. Lanceolate monolopia is a unique, neon-yellow color that can be distinguished at a great distance. Many of the initial occurrences of round-leaved filaree were located by standing on a tall hill overlooking the study area and picking out occurrences of monolopia. Each of these sites was then visited, many of which were found to support round-leaved filaree. Though not as striking, tidytips also had a characteristic cream color which could also be distinguished at a distance. It is important to note that not all sites with limestone-derived soils supported round-leaved filaree even though many of its typical plant associates were present.

Potential habitat for round-leaved filaree within the study area is restricted to areas supporting limestone-derived friable clay loam soils. These soils occur sporadically along steep slopes on areas mapped as Terrace Deposits in the northwestern corner of the study area and in scattered areas on Continental Deposits along the slopes in the southern portion of the study area (south of Highway 138) and in a few widely scattered locations in the eastern portion of the study area (north of Highway 138 and east of the aqueduct). While the surveys conducted for this study found nearly all the occurrences in the study area, there are undoubtedly some additional occurrences that were not found given the scattered, sometimes random distribution of the limestone-derived soils. Nonetheless, all additional occurrences should be restricted to those geologic formations with associated limestone (i.e. northwestern Terrace Deposits and all Continental Deposits). The species is not expected to occur within the Andesite, Tejon Lookout Granite, Santa Margarita, central or eastern Terrace Deposits, or Recent Alluvium Formations.

4.3.2.3 Sylvan Microseris (*Microseris sylvatica*)

Listing Status: CNPS List 4; no state or federal status

Sylvan microseris is an erect annual herb in the sunflower family (Asteraceae). It has a basal leaf cluster and pale yellow flowers that nod in bud (see photographs in Appendix 4-A). The species is uncommon but widely distributed in California through the central and southern Coast Ranges and the Sierra Nevada foothills. Prior to the survey, it was unclear if it occurred in Los Angeles County (CNPS 2001). It is a CNPS List 4 species, a watch list of species that are uncommon but not presently rare, threatened, or endangered.

Numerous (500+) occurrences of sylvan microseris were found in the study area during the 2003 surveys. Additional occurrences were located during 2004 surveys. Given this abundance and large population size, individual occurrences were not mapped. Instead, areas where sylvan microseris is likely to occur are mapped as large polygons in the study area. The area totals approximately 4,458 acres. With regards to geologic preferences and distribution, the large majority of occurrences were on soils associated with Continental Deposits and Terrace Deposits in the central and southeastern portions of the study area, in the same area supporting the perennial bunchgrass community. It did not generally occur on the bench-like Terrace Deposits, bordering Oso Creek and was uncommon on the mapped Terrace Deposits in the northwest portion of the study area. The species was conspicuously absent from intervening floodplains

composed of Recent Alluvium. It was also absent from volcanic- and limestone-derived soils and was uncommon on soils of the Santa Margarita and Tejon Lookout Granite Formations.

In those areas where the species occurred, it exhibited clear geomorphic preferences. While it occurred sporadically in a variety of landscape positions, it was by far most common on thin, well-drained gravelly or coarse sandy loam and clay loam soils on the upper north sides of ridges and hills, and on slopes and flats immediately bordering ephemeral drainages. The species was often particularly abundant on the triangular bench just above and between the confluence of small drainages.

Nearly all occurrences were located within the perennial bunchgrass plant community. A few were in areas bordered by blue oak woodland (south of Highway 138). There were no obvious unique plant associates. Some typical dominant associates included cheatgrass (*Bromus tectorum)*, soft chess (*Bromus hordeaceus)*, ripgut brome (*Bromus diandrus)*, turkey mullein (*Eremocarpus setigerus)*, redstem filaree (*Erodium cicutarium)*, and whitetip clover (*Trifolium albopurpureum* var. *albopurpureum).*

Since sylvan microseris occurs sporadically within a variety of landscape positions, all areas within the central and southeastern portions of the study area that are mapped as Continental Deposits and Terrace Deposits should be regarded as providing good potential habitat for the species (Figure 4.1 and 4.2). The perennial bunchgrass plant community and open oak woodland habitat within areas mapped as Santa Margarita Formation and Terrace Deposits (excluding the bench-like deposits bordering Oso Creek) in the western portion of the study area also provide moderate potential habitat. Areas mapped as Recent Alluvium, Andesite, and Tejon Lookout granite provide low to no potential habitat.

4.3.2.4 Piute Mountains Navarretia (*Navarretia setiloba*)

Listing Status: CNPS 1B; no state or federal status

Piute Mountains navarretia is a low-growing annual forb in the phlox family (Polemoniaceae). It has narrow, clustered, spine-tipped leaves, and blue-purple and white flowers in clustered heads (Appendix B). It is distinguished from the more common *Navarretia pubescens* by having flowering bracts widened above the middle and a white rather than purple flower throat.

Piute Mountains navarretia is a rare local endemic restricted to the far southern Sierra Nevada mountains and Tehachapi Ranges in Tulare and Kern Counties. The species occurs on heavy clay and gravelly loam soils in woodland and valley and foothill grassland habitats. Prior to these surveys, it was known from fewer than ten occurrences statewide, and, according to CNPS (2004), many historical occurrences have been searched for without success. The species had not been identified in the study area prior to these surveys. The nearest known occurrence was from Grasshopper Flat, about six miles north of Tejon Lake in the northern Tehachapi foothills. A total of 39 occurrences were located a few miles north of the study area on the Tejon Mountain Village Project Site during 2003 and 2004 surveys conducted by Vollmar Consulting. In all of those occurrences, Piute Mountain navarretia was found to be strictly associated with limestone-derived clay loam soils, and occurred within annual grassland or open oak woodland habitats.

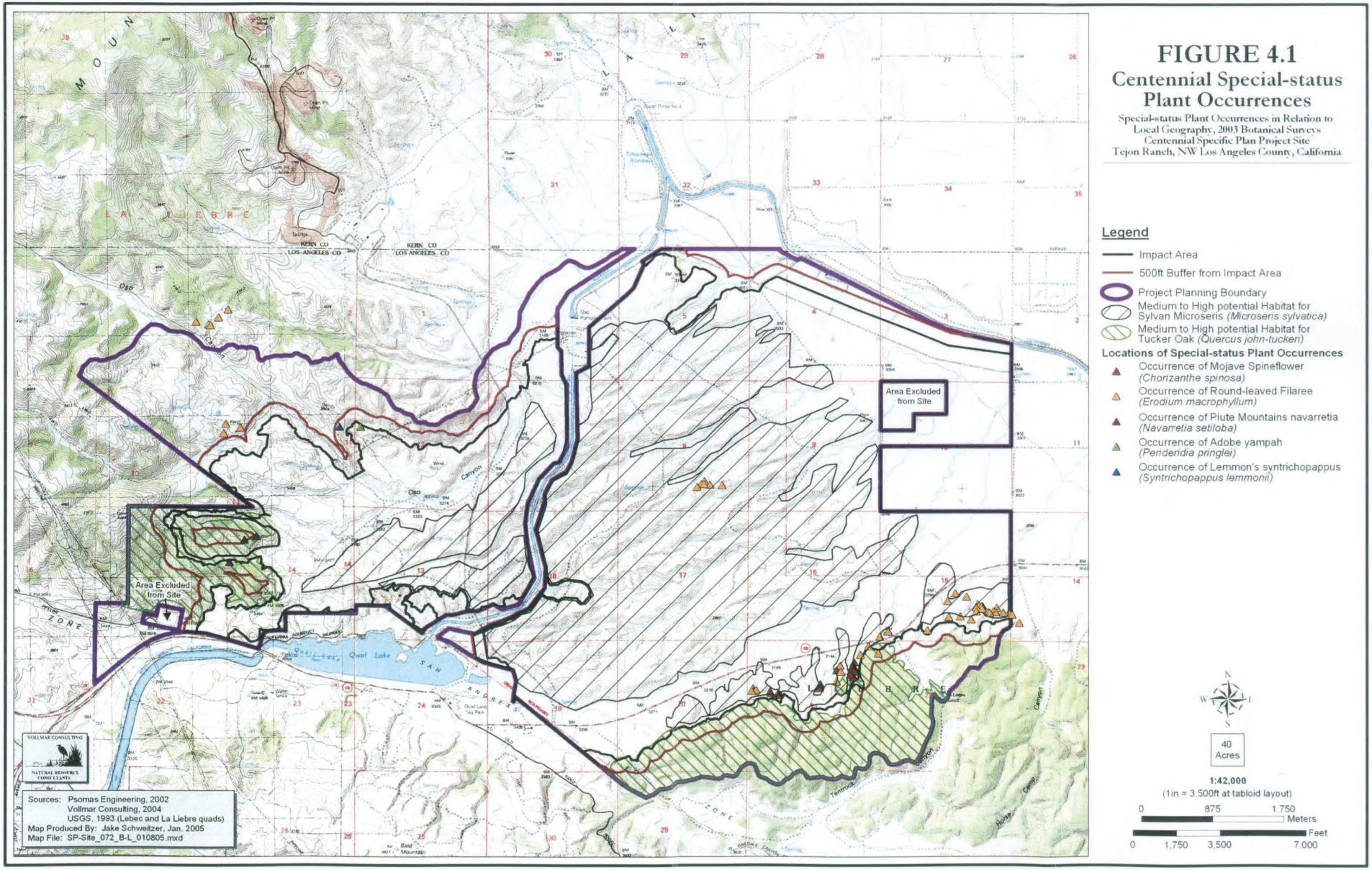

FIGURE 4.1

Centennial Special-status Plant Occurrences

Special-status Plant Occurrences in Relation to Local Geography, 2003 Botanical Surveys
Centennial Specific Plan Project Site
Tejon Ranch, NW Los Angeles County, California

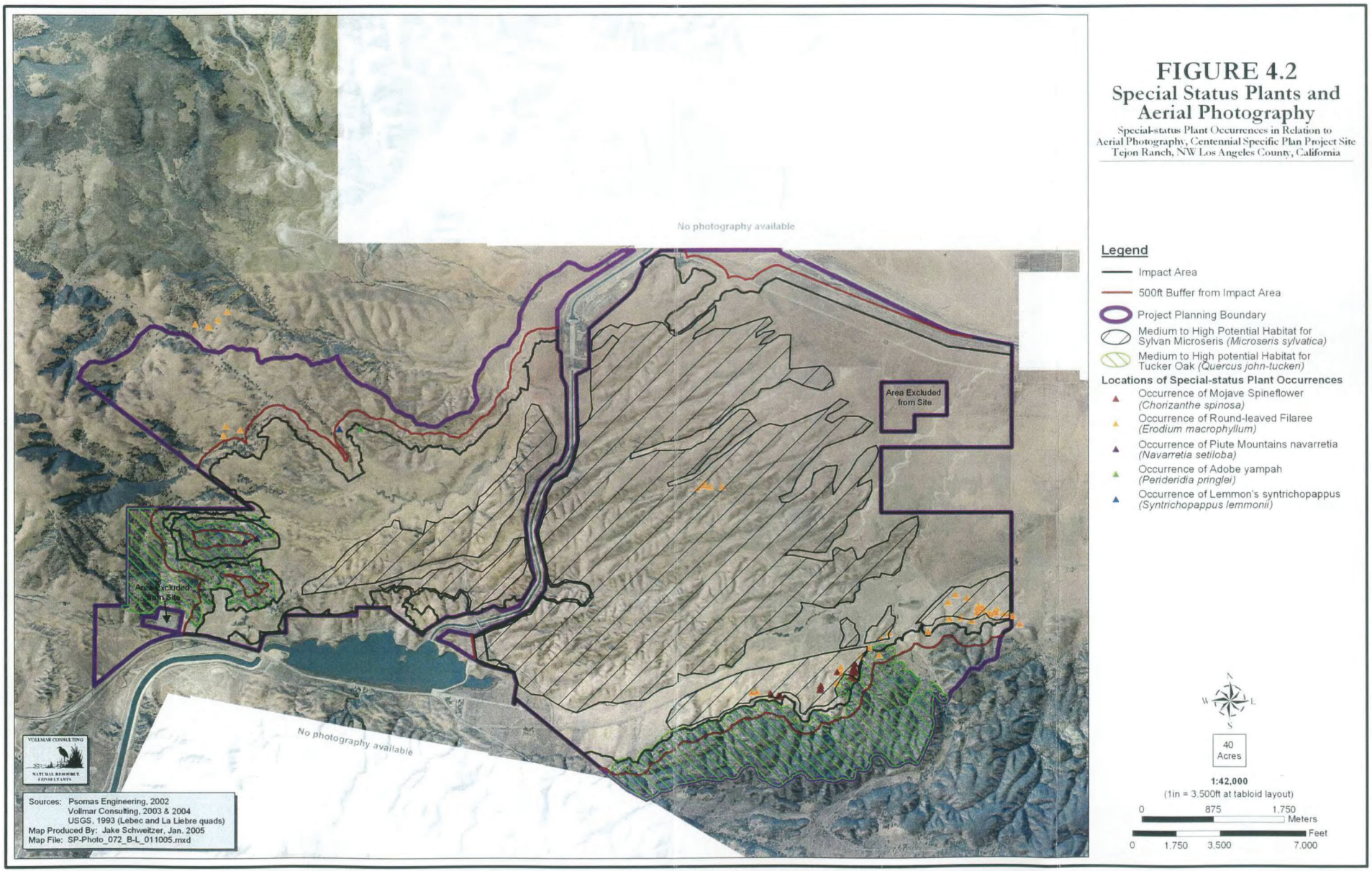

FIGURE 4.2
Special Status Plants and Aerial Photography

Special-status Plant Occurrences in Relation to Aerial Photography, Centennial Specific Plan Project Site Tejon Ranch, NW Los Angeles County, California

Legend

- Impact Area
- 500ft Buffer from Impact Area
- Project Planning Boundary
- Medium to High Potential Habitat for Sylvan Microseris *(Microseris sylvatica)*
- Medium to High potential Habitat for Tucker Oak *(Quercus john-tuckeri)*

Locations of Special-status Plant Occurrences

- Occurrence of Mojave Spineflower *(Chorizanthe spinosa)*
- Occurrence of Round-leaved Filaree *(Erodium macrophyllum)*
- Occurrence of Piute Mountains navarretia *(Navarretia setiloba)*
- Occurrence of Adobe yampah *(Perideridia pringlei)*
- Occurrence of Lemmon's syntrichopappus *(Syntrichopappus lemmonii)*

N W E S

40 Acres

1:42,000

(1in = 3,500ft at tabloid layout)

0 875 1,750 Meters

0 1,750 3,500 7,000 Feet

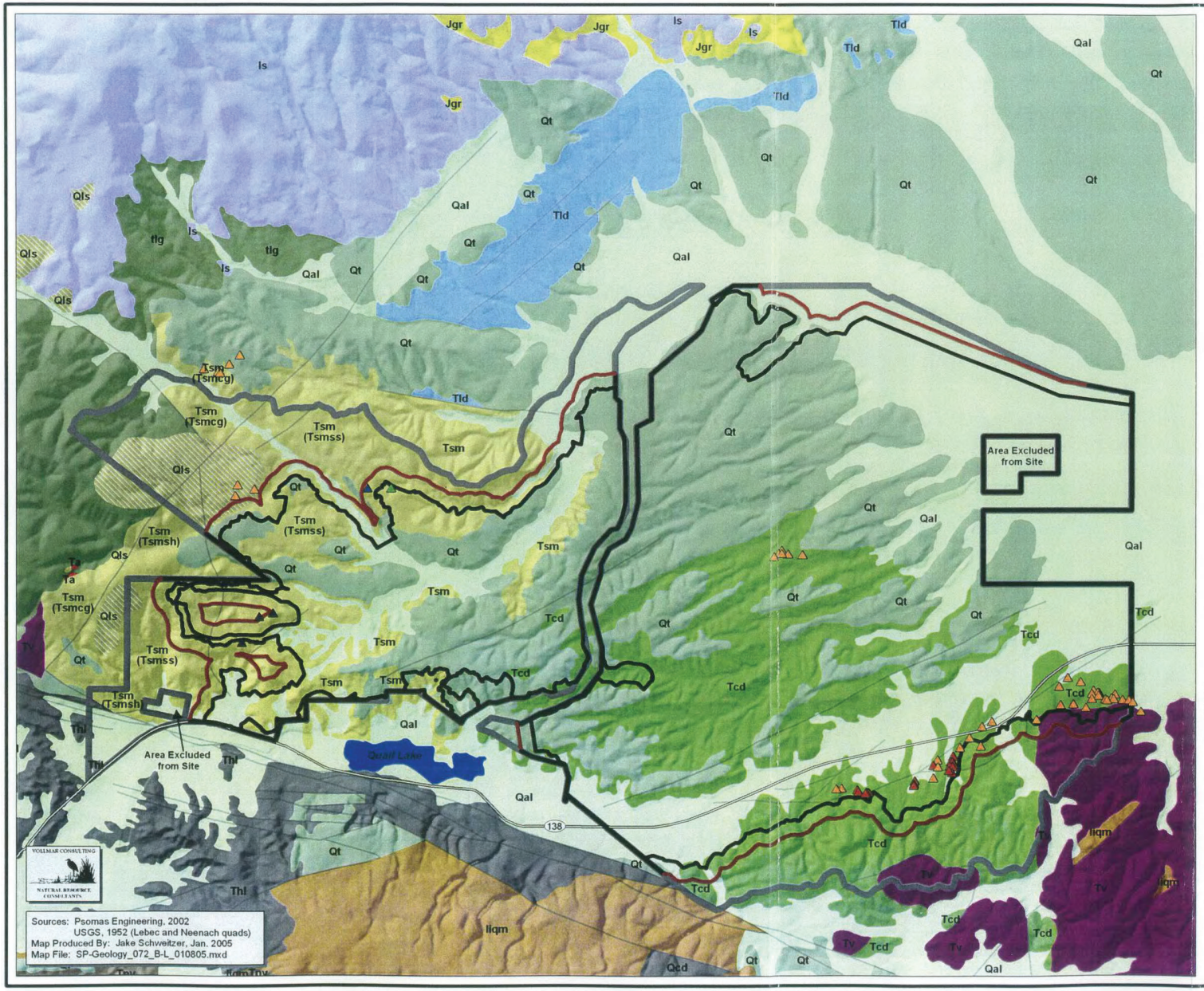

FIGURE 4.3
Special-status Plant Occurrences and Geology

Special-status Plant Occurences in Relation to Geology
2003 and 2004 Botanical Surveys
Centennial Specific Plan Project Site
Tejon Ranch, NW Los Angeles County, California

Legend

Locations of Special-status Plant Occurrences

- Occurrence of Mojave Spineflower *(Chorizanthe spinosa)*
- Occurrence of Round-leaved Filaree *(Erodium macrophyllum)*
- Occurrence of Piute Mountains navarretia *(Navarretia setiloba)*
- Occurrence of Adobe yampah *(Perideridia pringlei)*
- Occurrence of Lemmon's syntrichopappus *(Syntrichopappus lemmonii)*

- Impact Area
- 500ft Buffer from Impact Area
- Project Planning Boundary
- Fault Line

Geologic Formation

QUATERNARY
- Recent
  - Qal - Recent alluvium
  - Qls - Landslide
- Pleist
  - Qt - Terrace deposits and older alluvium

TERTIARY
- Pliocene
  - Tld - Lake deposits
  - Thl - White conglomerate sandstone with brown mudstone
  - Tpv - Brown siltstone with buff sandstone
- Miocene
  - Tsm - Santa Margarita formation*
  - Tcd - Continental deposits (conglomerate, sandstone & shale)
  - Tv - Purple andesite
  - Ta - Silicified andesite

JURASSIC OR CRETACEOUS
- Jgr - Granite
- tlg - Tejon Lookout granite
- liqm - Liebre quartz monzonite (gray hornblende biotite quartz monzonite)

PALEOZOIC
- Is - Limestone and marble

- Water (Quail Lake)

*Includes subtypes: Tsmsh (chiefly shales), Tsmcg (chiefly conglomerate) and Tsmss (chiefly sandstone)

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1:42,000 (1in = 3,500ft at tabloid layout)

0 875 1,750 Meters

0 1,750 3,500 7,000 Feet

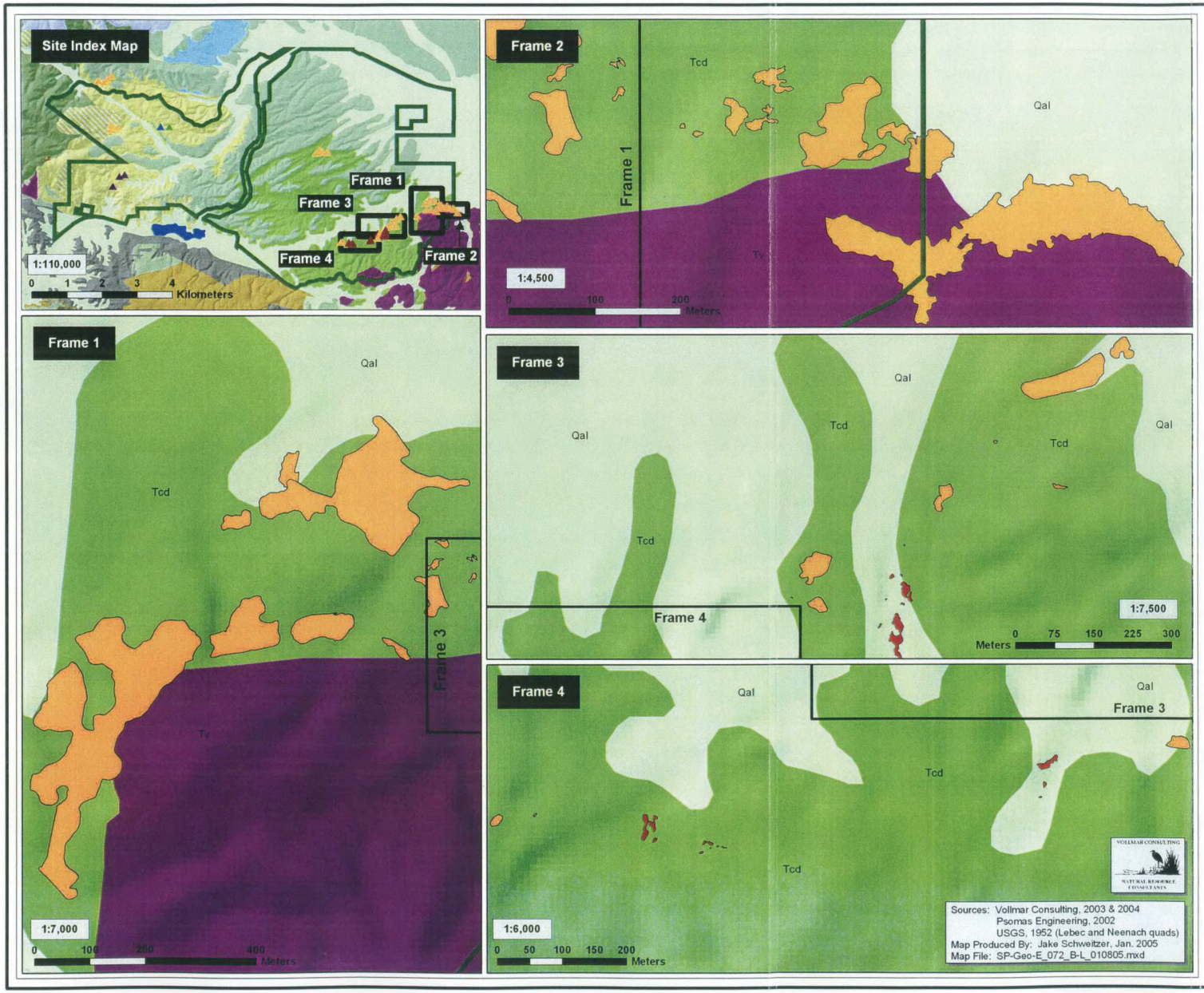

FIGURE 4.4a
Special-status Plants and Geology Eastern Map

Special-status Plant Occurences in Relation to Geology
2003 and 2004 Botanical Surveys
Centennial Specific Plan Project Site
Tejon Ranch, NW Los Angeles County, California

Legend

Project Planning Boundary

Locations of Special-status Plant Occurrences

- Occurrence of Mojave Spineflower *(Chorizanthe spinosa)*
- Occurrence of Round-leaved Filaree *(Erodium macrophyllum)*
- Occurrence of Piute Mountains navarretia *(Navarretia setiloba)*
- Occurrence of Adobe yampah *(Perideridia pringlei)*
- Occurrence of Lemmon's syntrichopappus *(Syntrichopappus lemmonii)*

Geologic Formation

QUATERNARY
- Recent
  - Qal - Recent alluvium
  - Qls - Landslide
- Pleist.
  - Qt - Terrace deposits and older alluvium

TERTIARY
- Pliocene
  - Tld - Lake deposits
  - Thl - White conglomerate sandstone with brown mudstone
  - Tpv - Brown siltstone with buff sandstone
- Miocene
  - Tsm - Santa Margarita formation*
  - Tcd - Continental deposits (conglomerate, sandstone & shale)
  - Tv - Purple andesite
  - Ta - Silicified andesite

JURASSIC OR CRETACEOUS
- Jgr - Granite
- tlg - Tejon Lookout granite
- liqm - Liebre quartz monzonite (gray hornblende biotite quartz monzonite)

PALEOZOIC
- ls - Limestone and marble

Water (Quail Lake)

*Includes subtypes: Tsmsh (chiefly shales), Tsmcg (chiefly conglomerate) and Tsmss (chiefly sandstone)

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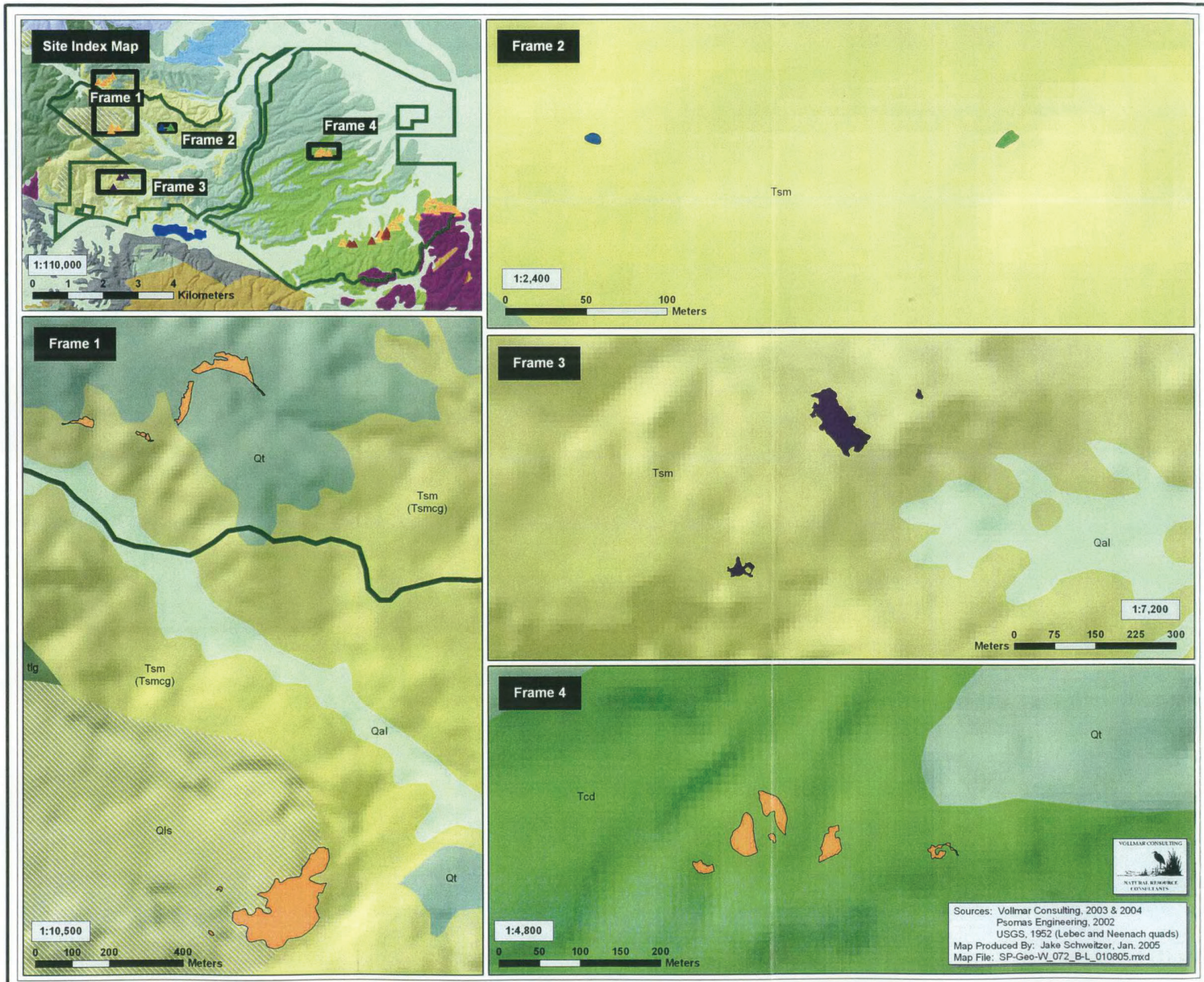


FIGURE 4.4b
Special-status Plants and Geology Western Map

Special-status Plant Occurences in Relation to Geology
2003 and 2004 Botanical Surveys
Centennial Specific Plan Project Site
Tejon Ranch, NW Los Angeles County, California

Legend

Project Planning Boundary

Locations of Special-status Plant Occurrences

- Occurrence of Mojave Spineflower *(Chorizanthe spinosa)*
- Occurrence of Round-leaved Filaree *(Erodium macrophyllum)*
- Occurrence of Piute Mountains navarretia *(Navarretia setiloba)*
- Occurrence of Adobe yampah *(Perideridia pringlei)*
- Occurrence of Lemmon's syntrichopappus *(Syntrichopappus lemmonii)*

Geologic Formation

QUATERNARY
- Recent
  - Qal - Recent alluvium
  - Qls - Landslide
- Pleist
  - Qt - Terrace deposits and older alluvium

TERTIARY
- Pliocene
  - Tld - Lake deposits
  - Thl - White conglomerate sandstone with brown mudstone
  - Tpv - Brown siltstone with buff sandstone
- Miocene
  - Tsm - Santa Margarita formation*
  - Tcd - Continental deposits (conglomerate, sandstone & shale)
  - Tv - Purple andesite
  - Ta - Silicified andesite

JURASSIC OR CRETACEOUS
- Jgr - Granite
- tlg - Tejon Lookout granite
- liqm - Liebre quartz monzonite (gray hornblende biotite quartz monzonite)

PALEOZOIC
- ls - Limestone and marble

Water (Quail Lake)

*Includes subtypes: Tsmsh (chiefly shales), Tsmcg (chiefly conglomerate) and Tsmss (chiefly sandstone)

N W E S

Three occurrences of Piute Mountains navarretia were located and mapped in the study area during 2004 surveys. The species was not found in the study area during the 2003 surveys. These occurrences represent the only known occurrences in Los Angeles County and the southernmost known occurrences. These occurrences were all found in the hills in the far western region of the study area. The first occurrence was located on a west-facing upper slope in a mixed perennial bunchgrass/introduced annual grassland community and supported approximately 15,000 plants in a 1.5-acre area. The second occurrence was located approximately 800 feet south-southwest of the first occurrence, on a southeast-facing slope in an annual grassland opening within a juniper-scrub oak woodland, and supported approximately 5000 plants scattered over a 0.20-acre area. A third smaller occurrence was located approximately 400 feet northeast of the initial occurrence near the top of a west-facing slope in an open mixed oak woodland-annual grassland, and supported approximately 100 plants in a 0.04-acre area. All three occurrences were situated on heavy clay loam and sandy clay loam soils apparently derived from the weathering of Santa Margarita Formation shales. Dominant associated species included one-sided bluestem (*Poa secunda ssp. secunda),* cheatgrass *(Bromus tectorum),* red brome (*Bromus madritensis ssp. rubens*), redstem filaree (*Erodium cicutarium)* and peppergrass (*Lepidium nitidum*).

The three occurrences were found to be exclusively associated with areas that had been rooted by pigs. In all three occurrences, the populations were strictly limited to the boundaries of soils recently disturbed from pig rooting. Intensive surveys of the areas immediately surrounding the disturbed areas found no additional individuals.

It is difficult to characterize potential habitat for Piute Mountains navarretia in the study area due to the small number of identified occurrences and the fact that all occurrences were associated with pig-disturbed soils. Some information can be derived from the 39 occurrences identified on the nearby Tejon Mountain Village Project Site. All of these occurrences were found to be strictly associated with limestone-derived clay loam soils in grasslands and/or open oak woodlands. In contrast, the three occurrences in this study area were not found on limestone-derived clay soils but were found on clay soils apparently derived from weathered shales.

Given the common occurrence on soils with a high clay content, potential habitat for Piute Mountains navarretia in the study area includes all areas with heavy clay soils whether derived from limestone, shale, or some other rock type. These soils occur sporadically along steep slopes in the northwestern corner of the study area, in scattered areas on Santa Margarita Formation in the southwestern portion of the study area, and in the few scattered areas where limestone-derived soils occur in the central and southeastern portions of the study area. The species is not expected to occur within the Andesite, Tejon Lookout Granite, central or eastern Terrace Deposits, or Recent Alluvium Formations.

4.3.2.5 Adobe Yampah (*Perideridia pringlei*)

Listing Status: CNPS List 4; no state or federal status

Adobe yampah is a 40-70 centimeter tall perennial herb in the carrot family (Apiaceae). It has a tuberous edible root, elongate, pinnately-divided leaves, and an open umbellate flowering head

with small, white flowers (Appendix B). The species occurs in scattered areas in the southern Sierra Nevada foothills, central Coast Ranges, and Western Transverse Ranges. While this species is known from sporadic occurrences in Kern and Northern Los Angeles Counties, it was not previously known in the immediate vicinity of the study area. It occurs in chaparral, woodland, and coastal scrub habitats. Adobe yampah is a CNPS List 4 species, a watch list of species that are uncommon but not presently rare, threatened, or endangered.

One occurrence of adobe yampah was identified during the 2004 surveys on an open north-facing slope in the western portion of the study area. The species was not identified in the study area during the 2003 surveys. The occurrence consisted of a small cluster of approximately 16 plants. The site was located on sandy to gravelly loam soils in a perennial bunchgrass plant community. The habitat is a dry, moderately steep slope with bare soil and low total vegetation cover, and is above an intermittent streambed and adjacent to annual grassland habitat. The site occurs on thin soils derived from sandstones of the Santa Margarita Formation. Dominant species at this site included one-sided bluestem grass (*Poa secunda ssp. secunda*), redstem filaree (*Erodium cicutarium*) and common lomatium (*Lomatium utriculatum).*

It is difficult to characterize potential habitat for adobe yampah based on only a single occurrence. Potential habitat for the species in the study area can be more accurately assessed by analyzing the ten occurrences located by Vollmar Consulting in 2003 and 2004 on the Tejon Mountain Village Project site a few miles north of this study area. The majority of these occurrences were located on gravelly, limestone-derived soils, although two occurrences were found on granitic soils. All ten occurrences were located within openings in oak woodlands or associated annual grasslands.

Based on assessments of the ten Tejon Mountain Village Project Site occurrences and the single occurrence in the study area, the best potential habitat for adobe yampah in the study area appears to be within grassland openings and open oak woodlands on slopes with gravelly loam soils. Areas where the species may occur include the steep slopes in the northwestern corner of the study area, the hills in the western portion of the study area, on north-facing slopes of the Santa Margarita Formation, and on the hills in the southeastern portion of the study area.

4.3.2.6 Tucker Oak *(Quercus john-tuckeri)*

Listing Status: CNPS List 4; no state or federal status

Tucker oak is an evergreen shrub or small tree, typically less than 7 meters tall, in the oak family (Fagaceae). Tucker oak can range from a scrubby six-foot tall shrub to a 20 to 30-foot tall tree with a single large trunk. It has finely hairy twigs and small leaves with irregularly spine-toothed margins and "fuzzy" lower surfaces. It occurs in chaparral, lower montane and pinyon and juniper habitats, and is known to hybridize with scrub oak (*Quercus berberidifolia*), blue oak (*Quercus douglasii*) and valley oak (*Quercus lobata*).

Formerly, California populations of what is now known as Tucker oak (*Quercus john-tuckeri*) were included with the species Sonoran scrub oak (*Quercus turbinella),* an oak that occurs in the Sonoran and Chihuahua deserts of the western United States. These California populations were

named *Quercus turbinella* ssp. *californica.* Differences in leaf and acorn characteristics distinguished the California populations from other populations. It was subsequently determined that these differences were substantial enough that the California populations should be considered a separate species called Tucker oak (*Quercus john-tuckeri*), named after John Tucker, a professor of botany from U.C. Davis. CNPS' Inventory of Rare and Endangered Plans of California (2004) still use *Quercus turbinella* as the primary name for the taxon but recognizes *Quercus john-tuckeri* as a synonym for the California population. The Jepson Manual names the taxon as *Quercus john-tuckeri* and this is the name that will be used in this report.

Tucker Oak is CNPS List 4 species, a watch list of species that are uncommon but not presently rare, threatened, or endangered. List 4 species occur either with limited distribution or infrequently throughout a broader area in California, and as such are not eligible for state listing. Nevertheless, CNPS strongly recommends that List 4 species be evaluated for consideration during CEQA documentation. Tucker Oak is classified as a List 4 species based on its disjunct distribution and limited range. The species occurs on the north slope of the San Gabriel Mountains, on the north slope of the Western Transverse Ranges and east slope of the Tehachapis, and then again on the interior South Coast Ranges. The Tucker Oak population within the study area occurs at the northeastern edge of the species range and therefore warrants careful management considerations.

Numerous Tucker oaks were found over large areas of the study area during the 2003 and 2004 surveys. Given the abundance and large population size, individual occurrences were not mapped. Instead, areas where Tucker oaks are likely to occur were mapped as large polygons. These areas total approximately 1,420 acres. Tucker oaks were found in two general regions in the study area. First, numerous Tucker oaks were found scattered in the hills in the southwestern region of the study area in open mixed oak woodland and chaparral habitat. It was typically found on moderate to steep slopes, on various aspects, growing with blue oak (*Quercus douglasii*), valley oak (*Quercus lobata*), bigberry manzanita (*Arctostaphylos glauca*) and red brome (*Bromus madritensis* ssp. *rubens*). A second population was found in oak woodland and chaparral habitat along the southeast edge of the study area, in the hills south of highway 138. In this second occurrence, the Tucker oaks were found on more open slopes growing as homogeneous woodland stands with a grassland understory or in mixed stands other tree and shrub species such as blue oak, California juniper (*Juniperus californica*), and Bigelow's coreopsis (*Coreopsis bigelovii*).

With regards to geologic preferences and distribution, the Tucker oak population in the western portion of the study area occurred on sandy to gravelly soils derived from weathered sandstone, shale and/or conglomerate of the Santa Margarita Formation. In the southeast region, it occurred on gravelly soils derived from Purple Andesite and Continental Deposits. It did not occur on the Continental Deposits and Terrace Deposits of the terrace tops and ridgelines in the central region of the study area nor on the Disturbed Alluvial Plains. It was also generally absent from the hills in the northwestern and northern portions of the study area where blue oak was the dominant species.

All of the oak woodlands on hill slopes in the southeastern and southwestern regions of the study area should be regarded as providing good potential habitat for Tucker oak.

4.3.2.7 Lemmon's Syntrichopappus (*Syntrichopappus lemmonii*)

Listing Status: CNPS List 4; no state or federal status

Lemmon's syntrichopappus is a small (2-10 cm tall) erect annual in the sunflower family (Asteraceae). It has alternate, simple leaves and solitary heads with tiny petals that are white with pink veins above and pinkish-purple below. The species is uncommon and occurs on sandy to gravelly slopes in chaparral and Joshua tree woodlands, on the southwest border of the Mojave Desert and adjoining slopes of the San Gabriel, San Jacinto and San Bernardino Mountains. It is known to occur in Los Angeles, San Bernardino and Monterey Counties, but prior to the surveys was not located in the vicinity of the study area. It is a CNPS List 4 species, a watch list of species that are uncommon but not presently rare, threatened, or endangered.

During 2004 surveys, one occurrence of Lemmon's syntrichopappus was located on an open, moderately steep northwest-facing slope in the north-central region of the study area. The site was located in a sparsely vegetated, mixed plant community dominated by non-native annual grasses, perennial bunchgrasses and native forbs, with prominent areas of bare soil and exposed sandstone bedrock. The site occurs on the Santa Margarita Formation on thin, eroding sandy to gravelly soils. The occurrence consists of approximately 30 plants scattered over a total area of approximately 450 square feet. Dominant associated species include one-sided bluestem (*Poa secunda* ssp. *secunda*), rock phacelia (*Phacelia egena*), mountain violet *(Viola purpurea* ssp. *quercetorum*), red brome (*Bromus madritensis* ssp. *rubens*), common lomatium (*Lomatium utriculatum*), and blue dicks (*Dichelostemma capitatum* ssp. *capitatum*).

Within this occurrence, Lemmon's syntrichopappus plants were typically located within a short distance of mountain violet. While mountain violet is certainly not a rare plant, it did occur infrequently in the study area. Lemmon's syntrichopappus and mountain violet appear to prefer similar soil types and/or other environmental conditions. Their association appears to be significant and mountain violet, when it occurs on similarly open sandy soils, can be used as an indicator for high potential habitat for Lemmon's syntrichopappus.

It is difficult to characterize potential habitat for Lemmon's syntrichopappus based on one occurrence in the study area. Based on this single occurrence, potential habitat appears to include north- and northwest-facing slopes with thin sandy soils over bedrock in open mixed annual or perennial grassland and forb communities. It may be that this species prefers the thin eroding soils derived from the marine sandstones of the Santa Margarita Formation. As such, all similar north- and northwest-facing slopes on Santa Margarita Formation should be considered as potential habitat for this species. This formation occurs in the north-central and southwestern regions of the study area.

Lemmon's syntrichopappus is a tiny ephemeral early-blooming annual (the plants located during 2004 surveys were typically less than 4 centimeters tall). Considering its tiny size, early

blooming time, and the low 2004 rainfall year, it is likely that there are additional occurrences in the study area in areas with potential habitat.

4.3.2.8 Other Special-status Plants

Seven other special-status plant species were identified as potentially occurring in the study area. The listing status, habitat, and other pertinent information for each of these species are summarized in Table 4.1 above. None of these species was found in the study area. Their potential for occurrence is discussed below.

Two species, Tejon poppy (*Eschscholtzia lemmonii* ssp. *kernensis*) [CNPS List 1B], and Comanche Point layia (*Layia leucopappa*) [CNPS List 1B], are associated with heavy clay soils and are found on the north side of the Tehachapi Mountains. Tejon poppy is also reported from the canyon west of Fort Tejon State Park. The best potential habitat for these species in the study area is the limestone-derived friable clay loam soils discussed at length above. Also, there were a few small areas with clay soils that appeared to be derived from shale of the Santa Margarita Formation. Given the importance of clay soils for round-leaved filaree and Piute Hills navarretia, these soils were carefully surveyed wherever they occurred throughout the survey area. Yet, neither of these other species was found. During status surveys, the survey team visited the purported location for Tejon poppy west of Fort Tejon State Park. Tejon poppy was not found but a similar species, foothill poppy (*Eschscholtzia caespitosa*), was found in the same location. As such, it may be that this foothill poppy was misidentified as Tejon poppy in this location. Since the study area is several miles outside the known range of Tejon poppy and Comanche Point layia, and since neither species was found during intensive surveys of potentially suitable soils, it is concluded that neither species is likely to occur in the study area.

Fort Tejon woolly sunflower (*Eriophyllum lanatum* var. *hallii*) [CNPS List 1B] is known from nineteen sites located a few miles north of the study area. One of the nineteen sites is located west of Fort Tejon State Park on a steep, south-facing shaded hillside within annual grassland habitat. Surrounding areas support a mosaic of grassland, oak woodland, and scrub habitats. Prior to these surveys, this site and one additional site located on the Tejon Ranch were the only known occurrences of this species in the vicinity of the study area. Eighteen of the nineteen Fort Tejon woolly sunflower sites occur on the Tejon Ranch, seventeen of which were located by Vollmar Consulting during 2003 and 2004 surveys of the Tejon Mountain Village Project Site. Two of these sites are situated along the rocky/gravelly upper edge of north-facing road cuts along unpaved ranch roads. Surrounding habitat is a mosaic of oak woodlands, annual grasslands, and chaparral. The remaining sixteen sites are all located on steep, north-facing hillsides within or adjacent to dense or moderately open oak woodlands-with mosaic stands of valley oak, black oak and shin oak. Canopy cover varied from dense to moderate. The typical understory was annual grasslands. With regards to substrate, the Fort Tejon woolly sunflower appears to prefer soils derived from metamorphic rock in areas mapped as brown hornfels or mixed hornfels and limestone. Given the known locations and habitat preferences of this species in the Tejon Mountain Village Project Site, the best potential habitat for Fort Tejon woolly sunflower is along the steep, north-facing hills with oak woodland and chaparral/scrub habitats in the western, northwestern, and southern portions of the study area. These areas were carefully

surveyed but the species was not found though a similar species, golden yarrow (*Eriophyllum confertiflorum* var. *confertiflorum*) was found.

Delicate blue cups (*Githopsis tenella*) [CNPS List 1B] is known from a high ridge (Purdy Ridge, approximately 1,600 meters (5,250 feet) in elevation) several miles northeast of the study area. This is the only known occurrence in the general region of the study area. This ridge, which was visited during status surveys, supports an isolated stands of white fir (*Abies concolor*) within a copse of canyon live oak. There were no habitats remotely like this within the study area and so it is concluded that there is no potential habitat for the species.

Flax-like monardella (*Monardella linoides* ssp. *oblonga*) [CNPS List 1B] is reported to occur in montane coniferous forest and pinyon/juniper woodland (CNPS 2001). There is a known occurrence below Chuchupate campground (south of Fort Tejon State Park). This site, which was visited during the status surveys, is situated on a rocky, north-facing slope with thin soils. The surrounding habitat is chaparral dominated by big-berry manzanita (*Arctostaphylos glauca*) and California flannelbush (*Fremontodendron californicum* ssp. *californicum*). Kennedy's mariposa lily (*Calochortus kennedyi* ssp. *kennedyi*) was found growing near the species. Chaparral dominated by big-berry manzanita occurs in scattered areas in the southwestern portion of the study area. These chaparral stands, which were thoroughly surveyed during 2003 and 2004, occur at a lower elevation and feel more arid than that found in association with the flax-like monardella. In addition, California flannelbush was not found in this habitat nor anywhere within the study area. Kennedy's mariposa lily was located in the far southeast region of the study area (south of Highway 138) in a mixed juniper woodland-perennial bunchgrass community. The two small populations were found growing in thin andesite soils. Given these conditions, it is concluded that flax-like monardella is unlikely to occur in the study area.

Bakersfield cactus (*Opuntia basilaris* var. *treleasei*) [State Endangered; Federal Threatened; CNPS List 1B] is endemic to the alluvial benches and fans along the southern and southeastern edges of the San Joaquin Valley. Known occurrences of the species west of I-5 and at Comanche Point were visited during the status surveys. Given its restricted distribution and particular microhabitat, it is concluded that there is no potential habitat for this species in the study area. The surveys did identify beavertail cactus (*Opuntia basilaris* var. *basilaris*), a closely related 'cousin', near the southern edge of the study area.

Silvery false lupine (*Thermopsis macrophylla* var. *argentata*) [CNPS List 1B] is known to occur on slopes in woodland, valley and foothill grassland, and lower coniferous forest habitats. It was found by Vollmar Consulting in numerous locations a few miles north of the study area during 2003 and 2004 surveys of the Tejon Mountain Village Project Site. Surveys conducted by previous consultants also reported the species in scattered locations in the vicinity of the cement plant just north of the study area. On the Tejon Mountain Village Project Site, silvery false lupine was often found on alluvial slopes below the uplifted limestone cap described earlier in this report. Given this association, it is not surprising the species was found in the vicinity of the cement plant (which is situated just below this cap to the south). However, no occurrences of this species were observed during field surveys either in the study area or around the cement plant. Nonetheless, potential habitat for this species is considered to occur within the study area

along the steep slopes bordering upper Oso Canyon, especially areas below limestone outcrops or limestone-derived soils.

4.4 Summary

Seven special-status plant species were identified within the study area including Mojave spineflower, round-leaved filaree, sylvan microseris, Piute Mountains navarretia, adobe yampah, Tucker oak and Lemmon's syntrichopappus. The occurrence and distribution of known and potential habitat for these special-status plants within the study area can best be understood by considering the underlying geologic and geomorphic landscape preferences of each species.

The nineteen occurrences of Mojave spineflower all occur on unusual soil barrens within the perennial bunchgrass community located south of Highway 138. This species appears to prefer the mixed andesite and limestone alluvial soils that are unique to this region of the study area.

The forty-six occurrences of round-leaved filaree scattered in the southeastern, eastern, and northwestern portions of the study area all occur on the limestone-derived friable clay soils. In the northwest, these soils are derived from weathering of underlying limestone bed rock or disjunct blocks from the nearby limestone cap. In the east and southeast, these soils appear to be derived from isolated, remnant weathered limestone blocks emplaced along with other alluvium as part of the Continental Deposit formation.

The large majority of sylvan microseris occurrences were found on the thin, well-drained gravelly or coarse sandy loam soils associated with Continental Deposits and Terrace Deposits in the central and southeastern portions of the study area. Within this area, the species was most commonly found on upper north-facing slopes and along the thin, well-drained gravelly soils bordering small, ephemeral drainages. The species generally did not occur on the bench-like Terrace Deposits bordering Oso Creek and was uncommon on the mapped Terrace Deposits in the northwest portion of the study area. The species was conspicuously absent from intervening floodplains of Recent Alluvium. It was also absent from volcanic- and limestone-derived soils and was uncommon on soils of the Santa Margarita and Tejon Lookout Granite Formations.

The three occurrences of Piute Mountains navarretia are located on upper slopes of sandy-clay loam soils associated with the Santa Margarita Formation in the southwest portion of the study area. These soils appear to be derived from weathered shales. In the study area, the species was strictly associated with areas disturbed by pig rooting. Given that these pigs are non-native species and the disturbance they cause began only with their introduction, it is unclear where, if at all, the species would have historically occurred. Piute Mountains navarretia is a very rare species, known from fewer than 20 occurrences primarily in the northern Tehachapi Range. The occurrences in the study area are the only known occurrences in Los Angeles County and are the southernmost known occurrences of the species.

The one occurrence of Adobe yampah in the study area was located on sandy to gravelly soils derived from sandstones of the Santa Margarita formation. It is difficult to summarize the environmental preferences of this species based on one occurrence. The ten occurrences located north of the study area, on the Tejon Mountain Village Project Site, however, provide additional

evidence of this species habitat preferences. In the ten occurrences on that project site, eight of the locations were found on limestone-derived clay loam soils, and two were located on more gravelly-textured granitic soils. Given these occurrences along with the one occurrence on sandstone-derived soils in the study area, it appears this species is not endemic to any particular soil or geologic type. Rather, it is restricted to certain geomorphic positions, particularly, north- and northwest-facing slopes with gravelly, well-drained soils.

The two large populations of Tucker oaks were found in the study area on hilly areas in the southwest and southeast regions of the study area. The population in the southwest occurred on thin, sandy soils derived from Santa Margarita Formation. The population in the southeast occurred on gravelly soils derived from Purple Andesite and Continental Deposits. Given the diversity of substrates, it appears that the dry, hilly conditions are more important for this species than the specific geologic formation. Interestingly, the species was generally absent from the hilly areas in the northwestern and northern portions of the study area. Blue oak was the dominant instead. This may be due to local differences in climate or soil conditions.
The one occurrence of Lemmon's syntrichopappus in the study area was located on thin, steep, northwest-facing sandy soils derived from the Santa Margarita Formation. There were areas of exposed soils and bedrock in the immediate vicinity of the occurrence. This occurrence was tucked in a canyon on a slope somewhat protected from the sun. There were few other places like this in the study area and this likely accounts for the overall rarity of the species in the study area.

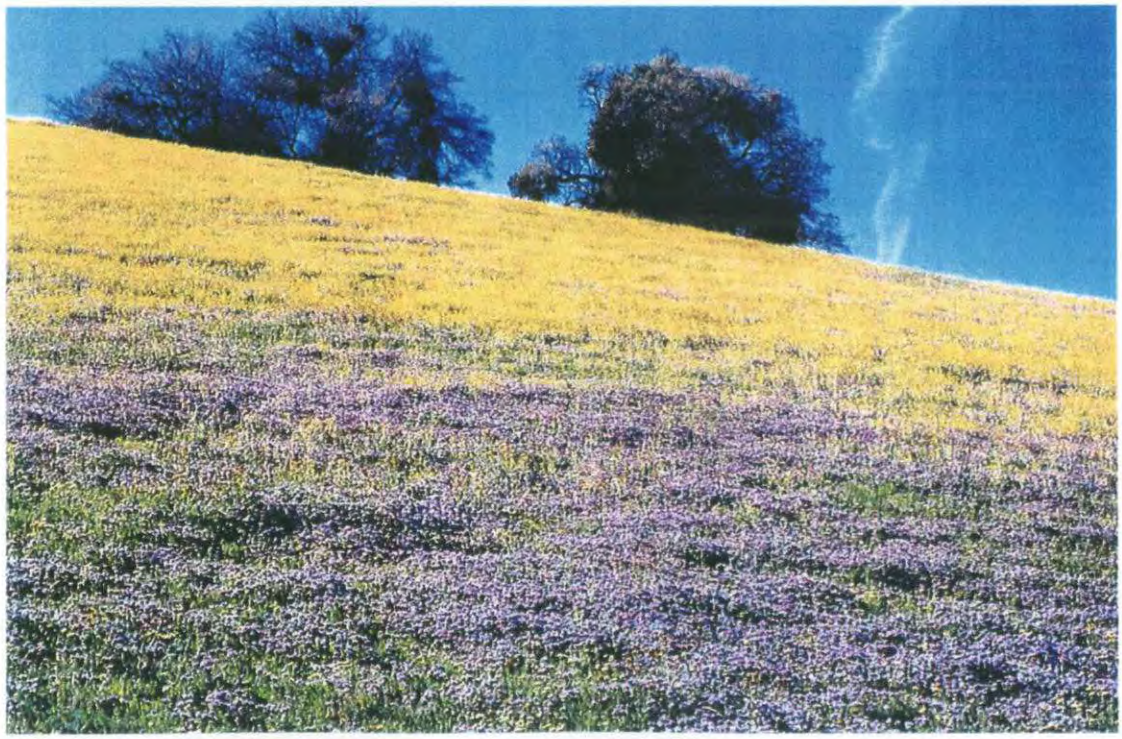
APPENDIX 4-A

PHOTOGRAPHS OF SPECIAL-STATUS PLANT SPECIES IDENTIFIED IN THE STUDY AREA

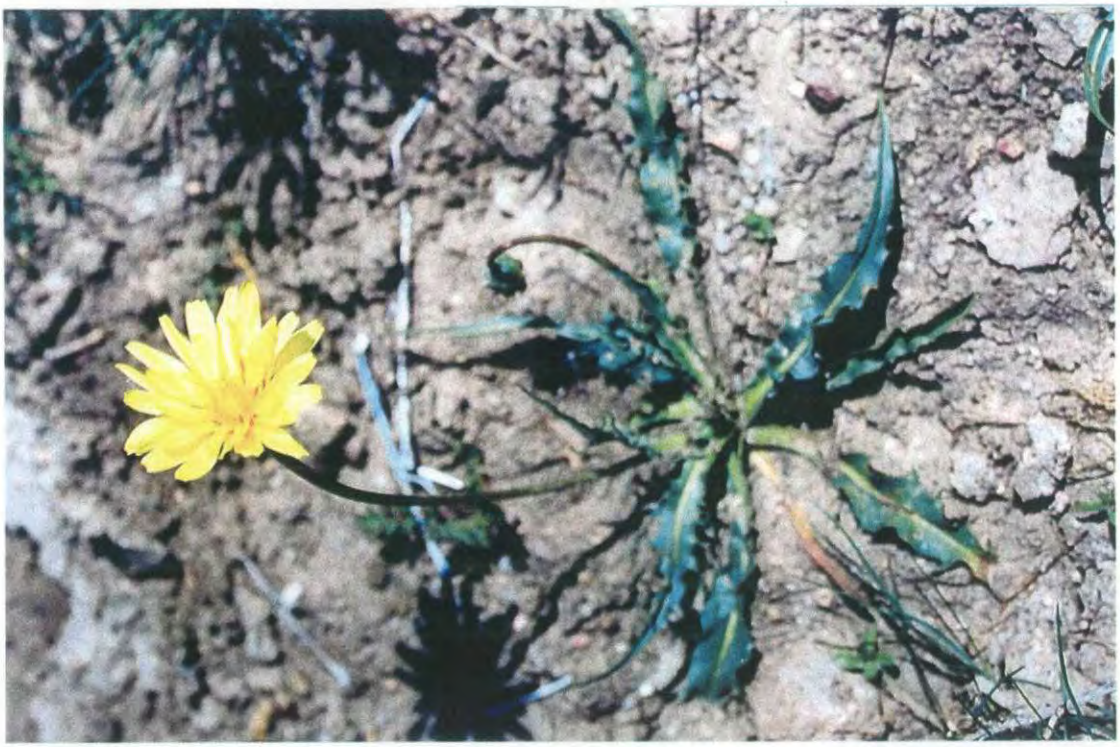
Mojave Spineflower (*Chorizanthe spinosa*) [Photo Credit: John Hale]

Habitat for Mojave Spineflower [Photo Credit: John Hale]

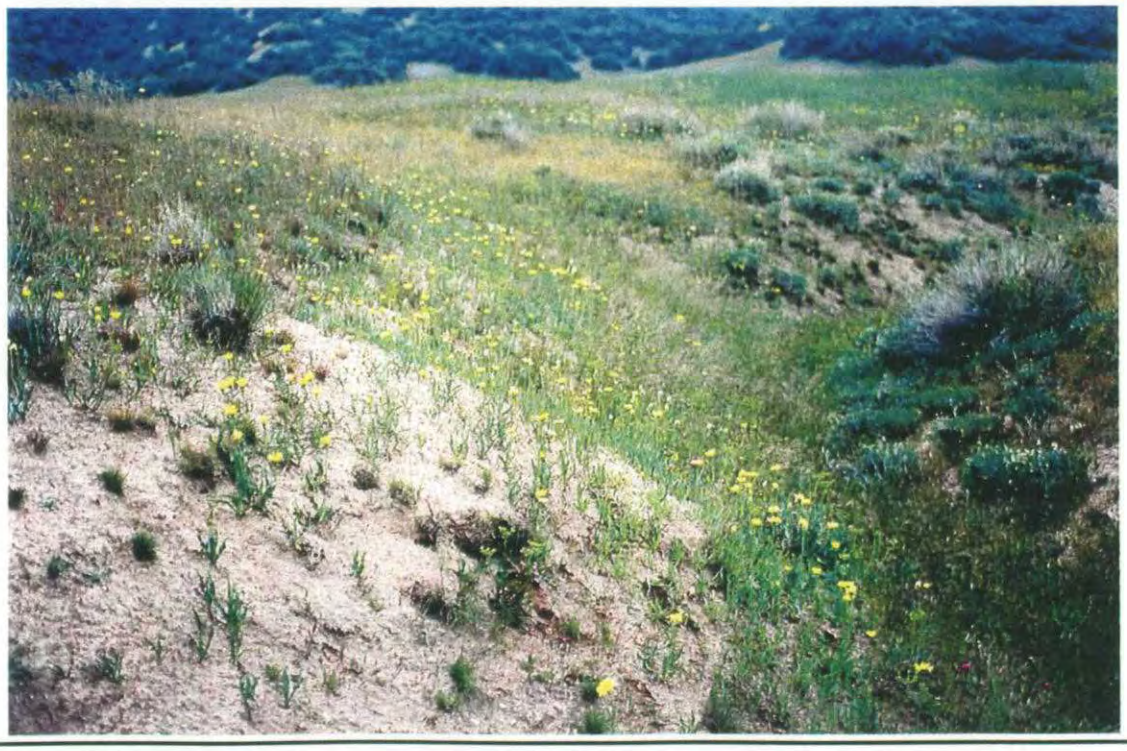
Round-leaved Filaree (*Erodium macrophyllum*) [Photo Credit: John Hale]



Habitat for Round-leaved Filaree [Photo Credit: John Hale]



Sylvan Microseris (*Microseris sylvatica*) [Photo Credit: John Hale]



Habitat for Sylvan Microseris [Photo Credit: John Hale]

Piute Mountains Navarretia (*Navarretia setiloba*) [Photo Credit: John Hale]

Habitat for Piute Mountains Navarretia [Photo Credit: John Hale]

Adobe Yampah (*Perideridia pringlei*) [Photo Credit: John Hale]

Habitat for Adobe Yampah [Photo Credit: John Hale]

APPENDIX 4-B

LIST OF ALL PLANT SPECIES IDENTIFIED IN THE STUDY AREA

Appendix 4-B. List of plant species observed on the Centennial Specific Plan Project Site during surveys conducted by Vollmar Consulting during spring and summer 2003. Scientific nomenclature corresponds to the Jepson Manual (Hickman, 1993). Asterisk (*) indicates non-native species; plus sign (+) indicates special-status species.

	FAMILY/Scientific Name	FAMILY/Common Name
	AMARANTHACEAE	AMARANTH FAMILY
*	*Amaranthus albus*	Tumbleweed
*	*Amaranthus retroflexus*	Red-root amaranthus
	APIACEAE	CELERY FAMILY
	Bowlesia incana	Hoary bowlesia
	Lomatium utriculatum	Common lomatium
+	*Perideridia pringlei*	Adobe yampah
	ASCLEPIADACEAE	MILKWEED FAMILY
	Asclepias californica	California milkweed
	Asclepias erosa	Desert milkweed
	Asclepias fascicularis	Narrow-leaved milkweed
	ASTERACEAE	SUNFLOWER FAMILY
	Achillea millefolium	California white yarrow
	Achyrachaena mollis	Blow wives
	Agoseris heterophylla	Mountain dandelion
	Agoseris retrorsa	Retrorse mountain dandelion
	Ambrosia acanthicarpa	Annual bur-sage
	Anaphalis margaritacea	Pearly everlasting
	Ancistrocarphus filagineus	Wooly fishhooks
	Artemisia douglasiana	Mugwort
	Artemisia tridentata ssp. tridentata	Big sagebrush
	Baccharis salicifolia	Mule fat
	Balsamorhiza deltoidea	Deltoid balsamroot
	Cirsium sp.	Thistle
*	*Centaurea solstitialis*	Yellow star-thistle
	Chaenactis glabriuscula var. glabriuscula	Common yellow chaenactis
	Chaenactis xantiana	Mojave pincushion
	Chrysothamnus nauseosus	Rabbitbrush
	Conyza canadensis var. canadensis	Western horseweed
	Coreopsis bigelovii	Bigelow's coreopsis
	Ericameria linearifolia	Narrowleaf goldenbush
	Erigeron breweri var. covillei	Brewer's daisy
	Eriophyllum confertiflorum var. confertiflorum	Golden yarrow
	Eriophyllum pringlei	Pringle's wooly sunflower
	Euthamia occidentalis	Western goldenrod
	Filago californica	California fluffweed
	Grindelia camporum var. camporum	Valley gumplant
	Helianthus annuus	Western sunflower
	Heterotheca grandiflora	Telegraph weed
	Heterothca sessiflora var. echioides	Golden aster
	Isocoma acradenia	Alkali goldenbush

	FAMILY/Scientific Name	FAMILY/Common Name
	Iva axillaris ssp. robusta	Poverty weed
*	*Lactuca serriola*	Prickly wild lettuce
	Lasthenia californica	California goldfields
	Layia glandulosa ssp. glandulosa	White layia
	Layia pentachaeta ssp. albida	White sierra layia
	Layia platyglossa	Tidy tips
	Lessingia lemmonii var. piersonii	Cudweed aster
	Macaeranthera canascens	Hoary aster
	Malacothrix californica	California cliff-aster
	Malacothrix coulteri	Snakeheads
+	*Microseris sylvatica*	Woodland microseris
	Monolopia lanceolata	Lanceolate monolopia
	Psilocarphus brevissimus var. brevissimus	Dwarf woolly-heads
	Senecio breweri	Brewer's butterweed
	Senecio flaccidus var. douglasii	Bush groundsel
	Solidago californica	California goldenrod
	Stephanomeria exigua ssp. coronaria	Wreath stephanomeria
	Stephanomeria virgata ssp. pleurocarpa	Wand stephanomeria
	Syntrichopappus fremontii	Fremont's syntrichopappus
+	*Syntrichopappus lemmonii*	Lemmon's syntrichopappus
	Uropappus lindleyi	Silver puffs
*	*Xanthium strumarium*	Cocklebur
	AZOLLACEAE	MOSQUITO FERN FAMILY
	Azolla filiculoides	Mosquito fern
	BORAGINACEAE	BORAGE FAMILY
	Amsinckia menziesii var. intermedia	Common fiddlenck
	Amsinckia menziesii var. menziesii	Menzies' fiddleneck
	Amsinckia tessellata var. gloriosa	Devil's lettuce
	Amsinckia tessellata var. tessellata	Devil's lettuce
	Cryptantha sp.	Cryptantha
	Heliotropium curassavicum	Wild heliotrope
	Pectocarya linearis ssp. ferocula	Slender pectocarya
	Pectocarya pennicillata	Hair-tufted pectocarya
	Pectocarya setosa	Setose pectocarya
	Plagiobothrys fulvus	Common popcornflower
	Plagiobothrys nothofulvus	Rusty popcornflower
	BRASSICAEAE	MUSTARD FAMILY
	Arabis pulchra var. pulchra	Rockcress
*	*Brassica nigra*	Black mustard
	Caulanthus coulteri	Coulter's jewelflower
*	*Descurainia sophia*	Tansy mustard
	Guillenia lasiophylla	California mustard
	Guillenia lemmonii	Lemmon's guillenia
*	*Hirschfeldia incana*	Summer mustard
*	*Lepidium latifolium*	Broad-leaved pepper- grass
	Lepidium nitidum	Common pepper-grass

	FAMILY/Scientific Name	FAMILY/Common Name
	Rorippa nasturtium-aquaticum	Water-cress
*	*Sisymbrium altissimum*	Tumble mustard
	Thysanocarpus curvipes	Lace pod
	Thysanocarpus laciniatus	Slender lace pod
	Tropidocarpum gracile	Twisted slender tropidocarpum
	CACTACEAE	CACTUS FAMILY
	Opuntia basilaris var. basilaris	Beavertail cactus
	CAPPARACEAE	CAPER FAMILY
	Isomeris arborea	Bladderpod
	CAPRIFOLIACEAE	HONEYSUCKLE FAMILY
	Sambucus mexicana	Blue elderberry
	Symphoricarpos rotundifolius var. parishii	Mountain snowberry
	CHENOPODIACEAE	GOOSE-FOOT FAMILY
*	*Chenopodium album*	White goosefoot
	CONVOLVULACEAE	MORNING-GLORY FAMILY
	Calystegia occidentalis ssp. fulcrata	Wild morning-glory
	Cressa truxillensis	Alkali weed
	CUCURBITACEAE	CUCUMBER FAMILY
	Cucurbita foetidissima	Stinking gourd
	Marah fabaceus	Man-root
	CUPRESSACEAE	CYPRESS FAMILY
	Juniperus californica	California juniper
	CUSCUTACEAE	DODDER FAMILY
	Cuscuta californica	California dodder
	CYPERACEAE	SEDGE FAMILY
	Carex sp.	Sedge
	Eleocharis macrostachya	Common spike-rush
	Scirpus acutus var. occidentalis	Viscid tule
	EPHEDRACEAE	EPHEDRA FAMILY
	Ephedra viridis	Green Mormon tea
	ERICACEAE	HEATH FAMILY
	Arctostaphylos glauca	Bigberry manzanita
	EUPHORBIACEAE	SPURGE FAMILY
	Chamaesyce albomarginata	Rattlesnake spurge
	Eremocarpus setigerus	Dove weed
	FABACEAE	PEA FAMILY
	Astragalus didymocarpus var. didymocarpus	Locoweed
	Astragalus douglasii var. douglasii	Douglas' locoweed
	Astragalus purshii var. tinctus	Pursh's dyed milk-vetch
	Lotus humistratus	Short-podded lotus
	Lotus scoparius	Deerweed
	Lotus strigosus var. strigosus	Strigose lotus
	Lotus wrangelianus	Wrangel's lotus
	Lupinus bicolor	Bicolored lupine
	Lupinus excubitus var. austromontanus	Interior bush lupine
	Lupinus formosus var. formosus	Summer bush lupine

	FAMILY/Scientific Name	FAMILY/Common Name
*	*Lupinus microcarpus var. densiflorus*	White-worled lupine
*	*Lupinus microcarpus var. microcarpus*	Chick lupine
*	*Medicago polymorpha*	Bur-clover
*	*Melilotus indica*	Yellow sweetclover
	Pediomelum californicum	California Indian beard
	Robinia pseudoacacia	Black locust
	Trifolium albopurpureum var. albopurpureum	Whitetip clover
	Trifolium gracilentum var. gracilentum	Pin-point clover
	Trifolium wildenovii	Tomcat clover
	Vicia americana ssp. americana	American vetch
*	*Vicia benghalensis*	Mediterranean vetch
	Vicia hassei	Vetch
	FAGACEAE	BEECH FAMILY
	Quercus chrysolepis	Canyon live or golden-cup oak
	Quercus douglasii	Blue oak
+	*Quercus john-tuckeri*	Tucker oak
	Quercus lobata	Valley oak
	Quercus wislizenii var. frutescens	Interior live oak
	GERANIACEAE	GERANIUM FAMILY
*	*Erodium botrys*	Long-beaked filaree
*	*Erodium cicutarium*	Redstem filaree
+	*Erodium macrophyllum*	Large-leaved erodium
	GROSSULARIACEAE	GOOSEBERRY FAMILY
	Ribes quercetorum	Oak gooseberry
	HYDROPHYLLACEAE	WATERLEAF FAMILY
	Emmenanthe penduliflora var. penduliflora	Yellow whispering-bells
	Eriodictyon crassifolium var. nigrescens	Black thickleaf yerba santa
	Nemophila menziesii ssp. menziesii	Baby blue-eyes
	Phacelia ciliata	Ciliate phacelia
	Phacelia egena	Rock phacelia
	Phacelia fremontii	Fremont's phacelia
	Phacelia tanacetifolia	Tansy-leaved phacelia
	Pholistoma membranaceum	White fiesta flower
	JUNCACEAE	RUSH FAMILY
	Juncus balticus	Baltic rush
	Juncus bufonius var. bufonius	Common toad rush
	Juncus effusus var. pacificus	Bog rush
	Juncus mexicanus	Mexican rush
	Juncus xiphioides	Iris-leaved rush
	LAMIACAEAE	MINT FAMILY
*	*Marrubium vulgare*	White horehound
	Salvia carduacea	Thistle sage
	Salvia columbariae	Chia
	Stachys albens	White hedge nettle
	Stachys bullata	California hedge nettle
	Trichostemma lanceolatum	Vinegar weed

	FAMILY/Scientific Name	FAMILY/Common Name
	LILIACEAE	LILY FAMILY
	Allium fimbriatum var. fimbriatum	onion
	Allium lacunosum ssp. davisiae	onion
	Bloomeria crocea	Common goldenstar
	Calochortus kennedyi ssp. kennedyi	Kennedy mariposa lilly
	Dichelostemma capitatum ssp. capitatum	Blue dicks
	Muilla maritima	Common muilla
	Triteleia hyacinthina	White triteleia
	Yucca whipplei	Our lord's candle
	LOASACEAE	LOASA FAMILY
	Mentzelia albicaulis	White-stemmed stickleaf
	LYTHRACEAE	LOOSESTRIFE FAMILY
	Lythrum californicum	California loosestrife
	MALVACEAE	MALLOW FAMILY
	Sidalcea malvaeflora ssp. sparsifolia	Checker bloom
	NYCTAGINACEAE	FOUR O'CLOCK FAMILY
	Mirablis californica	Wishbone bush
	ONAGRACEAE	EVENING PRIMROSE FAMILY
	Camissonia campestris ssp. campestris	Sun cups
	Clarkia purpurea ssp. quadrivulneris	Purple clarkia
	Epilobium canum	California fuschia
	Oenothera californica ssp. californica	White evening primrose
	Oenothera deltoides ssp. cognata	Dune evening primrose
	PAPAVERACEAE	POPPY FAMILY
	Argemone munita	Prickly poppy
	Eschscholzia californica	California poppy
	Platystemon californicus	Cream cups
	PINACEAE	PINE FAMILY
	Pinus sabiniana	Foothill pine
	POACEAE	GRASS FAMILY
	Acnatherum speciosum	Showy needlegrass
*	*Avena barbata*	Slender wild oat
*	*Bromus diandrus*	Ripgut grass
*	*Bromus hordeaceus*	Soft chess
*	*Bromus madritensis ssp. rubens*	Red brome
*	*Bromus tectorum*	Cheat grass
*	*Cynodon dactylon*	Bermuda grass
	Deschampsia danthonioides	Annual hairgrass
	Distichlis spicata	Coastal saltgrass
	Elymus multisetus	Big squirreltail
	Hordeum brachyantherum ssp. brachyantherum	Meadow barley
*	*Hordeum murinum ssp. leporinum*	Hare barley
	Leymus condensatus	Giant wild rye
	Leymus triticoides	Alkali rye-grass
	Melica imperfecta	Coast or small-flowered melic grass
	Muhlenbergia rigens	Deer grass

	FAMILY/Scientific Name	FAMILY/Common Name
	Nassella cernua	Nodding needlegrass
*	*Poa annua*	Annual bluegrass
	Poa bulbosa	Fruiting bluegrass
	Poa secunda ssp. secunda	One-sided bluegrass
*	*Polypogon monspeliensis*	Rabbitsfoot grass
*	*Schismus barbatus*	Bearded Mediterranean grass
*	*Secale cereale*	Cultivated rye
	Vulpia bromoides	Six-weeks fescue
	Vulpia microstachys var. microstachys	Fescue
	Vulpia microstachys var. pauciflora	Few-flowered fescue
	POLEMONIACEAE	PHLOX FAMILY
	Gilia aliquanta ssp. aliquanta	Gilia
	Gilia breccarium ssp. breccarium	Gilia
	Gilia capitata ssp. abrotanifolia	Gilia
	Gilia tricolor var. diffusa	Gilia
	Gilia tricolor var. tricolor	Gilia
	Linanthus bigelovii	Bigelow's linanthus
	Linanthus dichotomus	Evening snow
	Linanthus liniflorus	Flax-flowered linanthus
	Linanthus parryae	Parry's linanthus
	Linanthus parviflorus	Common linanthus
+	*Navarretia setiloba*	Piute mountain navarretia
	Phlox gracilis	Slender phlox
	POLYGONACEAE	BUCKWHEAT FAMILY
+	*Chorizanthe spinosa*	Mojave spineflower
	Chorizanthe xanti	Xantus' spineflower
	Eriogonum baileyi var. *baileyi*	Bailey's buckwheat
	Eriogonum elongatum var. *elongatum*	Long-stemmed buckwheat
	Eriogonum fasciculatum ssp. *polifolium*	Hoary California buckwheat
	Eriogonum nudum var. *westonii*	Weston's barestem buckwheat
	Eriogonum roseum	Wand buckwheat
	Eriogonum viridescens	Slender buckwheat
*	*Polygonum arenastrum*	Common knotweed
*	*Rumex crispus*	Curly dock
	Rumex hymenosepalus	Wild rhubarb
	Rumex salicifolius var. salcifolius	Willow dock
	PORTULACACEAE	PURSLANE FAMILY
	Calandrinia ciliata	Redmaids
	Claytonia exigua ssp. *exigua*	Little miner's lettuce
	Claytonia parvifolia ssp. *parviflora*	Small-flowered miner's lettuce
	Claytonia perfoliata ssp. *perfoliata*	Miner's lettuce
	ROSACEAE	ROSE FAMILY
	Adenostoma fasciculatum	Chamise
	RUBIACEAE	BEDSTRAW FAMILY
	Galium andrewsii ssp.andrewsii	Needle bedstraw
	Galium angustifolium ssp. angustifolium	Narrow-leaved bedstraw

	FAMILY/Scientific Name	**FAMILY/Common Name**
	Galium aparine	Catchweed bedstraw
	SALICACEAE	WILLOW FAMILY
	Populus fremontii	Fremont cottonwood
	Salix exigua	Sandbar willow
	Salix gooddingii	Gooding's black willow
	Salix laevigata	Red willow
	Salix lasiolepis	Arroyo willow
	SAURURACEAE	LIZARD-TAIL FAMILY
	Anemopsis californica	Yerba mansa
	SCROPHULARIACEAE	SNAPDRAGON FAMILY
	Castilleja affinis var. *affinis*	Coastal paintbrush
	Castilleja exserta ssp. *exserta*	Purple owl's-clover
	Collinsia bartisaefolia var. *davidsonii*	Collinsia
	Keckiella breviflora var. *breviflora*	Small-flowered keckiella
	Keckiella ternata var. *septontrionalis*	Blue-stemmed keckiella
	Mimulus fremontii	Fremont's monkeyflower
	Mimulus guttatus	Common streamside monkeyflower
	Penstemon centranthifolius	Scarlet bugler
	Penstemon heterophyllus var. *heterophyllus*	Penstemon
	Veronica anagallis-aquatica	Common speedwell
	SOLANCAEAE	NIGHTSHADE FAMILY
	Datura wrightii	Jimson weed
	Nicotiana quadrivalvis	Indian tobacco
	TAMARICACEAE	TAMARISK
*	*Tamarix parviflora*	Small-flowered salt cedar
	VIOLACEAE	VIOLET FAMILY
	Viola purpurea ssp. *quercetorum*	Mountain violet
	VISCACEAE	MISTLETOE FAMILY
	Phoradendron villosum	Oak mistletoe

5.0 PERENNIAL BUNCHGRASS PLANT COMMUNITY STUDY

5.1 Introduction

This section of the report summarizes the methods and results of an ecological study of the sensitive perennial bunchgrass plant community that dominates the broad central and southeastern regions of the study area. This plant community is characterized by a high cover of native perennial bunchgrasses and wildflowers, and a conspicuously low cover of introduced annual grasses. Historically, this community type is thought to have occurred throughout much of interior lowland California but has been almost entirely replaced by invasive annual grasses introduced during Europeans settlement (Heady, 1995; Keeley, 1990). While individuals and small clusters of bunchgrasses occur sporadically throughout California's annual grasslands, there are currently no more than a couple of dozen moderate- to high-quality perennial bunchgrass community stands documented in California, most of which are smaller than 300 acres in total area (Barry, 1972). Given its extreme rarity and endangerment, the perennial bunchgrass community is considered a sensitive habitat by the State of California. Table 5.1 summarizes the current perennial bunchgrass community sites known to occur in California.

This plant community was identified during 2003 surveys as an herbaceous community, and was described in the 2003 report as "dominated by a mix of native and non-native forbs and native perennial bunchgrasses." The perennial bunchgrass component of the community appeared sub-dominant to the wildflower component in 2003 because of the favorable rains of 2002/2003 and the subsequent showy 2003 spring wildflower display. Our continued plant community study during the below average rainfall of 2003/2004, however, demonstrated that this community is indeed dominated by perennial bunchgrass species with a conspicuous wildflower component, and an unusual lack of introduced annual grass species. Quite frankly, we have rarely seen extensive intact perennial bunchgrass stands of this nature, and it required a second year, with the wildflower component absent, to recognize the habitat as a perennial bunchgrass community.

The perennial bunchgrass community on the site is unique in California for its total size and quality. It incorporates approximately 5,500 continuous acres distributed across a distinct geomorphic feature consisting of a series of weathered ridges and terraces formed from old and very old alluvium. The stand has minimal intrusion of introduced annual grasses and a high richness of bunchgrass species. Six different species occur within the stand. Four of these are either dominant or subdominant and form a complex matrix with semi-predictable distribution patterns across the ridges and terraces based on landscape position. During favorable rain years, such as 2002/2003, the community supports a diverse, showy array of more than 70 native wildflower species. These species were also found to be highly stratified by landscape position.

This study was conducted to determine the overall distribution of the bunchgrass community within the study area and to assess its habitat quality across different landscape positions (i.e. floodplains, hill slopes, ridge tops, etc.). The study also compares the perennial bunchgrass stand on the site with other known stands in the region and across the state based on a review of available literature and reconnaissance-level site visits to known occurrences. The results of this study can be used to assess relative potential impacts of the proposed project to the perennial

bunchgrass community in different regions of the study area and locally on specific landscape features, and to develop approaches for avoiding or minimizing these impacts.

This section begins with a landscape and habitat characteristics associated with the bunchgrass community. A full discussion of the perennial bunchgrass plant community study then follows with a description of the methods, results, and discussion. Statistical tables of data analyses are provided in appendices.

Table 5.1 Statewide perennial bunchgrass plant communities in California (Barry, 1972, Dremann, 2003, and Vollmar and Vos, pers. comm., 2004)

County	Location	Acres	Quality
Colusa	Salt Creek Canyon	200	Good
Lassen	Lynn's Prairie	2,500	Excellent
Los Angeles	Hungry Valley State Vehicular Recreation Area	3,000	Fair
Los Angeles	**Centennial Specific Plan Project Site**	**5,500**	**Excellent**
Los Angeles	Terrace Deposits Northeast of Centennial Specific Plan Project Site	3,000 – 4,000	Good - Excellent
Kern	Wind Wolves Preserve	300	Fair
San Luis Obispo	Cal. State Poly College	300	Excellent
San Luis Obispo	Montana de Oro State Park	<50	Fair
San Luis Obispo	Camp San Luis Obispo Military Reserve	Unknown	Unknown
San Luis Obispo/Monterey	Camp Roberts Military Reserve	1,500 – 2,000	Fair - Excellent
San Luis Obispo	Carrizo Plain National Monument	Unknown	Fair
Solano	Dozier North & South	1,000	Excellent
Solano	Leutholz Ranch & Rio Vista Jct.	150	Fair
Sonoma	Bennett Mtn./Annadel State Park	550	Fair

5.2 Background Landscape and Plant Community Information

5.2.1 Landscape Setting

5.2.1.1 Regional Geography

The study area, and its associated bunchgrass community, is situated at the junction of three major geographic provinces: the Mojave Desert Province to the east, the Western Transverse Ranges to the west, and the Sierra Nevada Province (the Tehachapi Range) to the north (see Figure 3.1). The boundaries between these provinces are defined by California's two largest faults: the San Andreas Fault, which divides the Mohave Desert Province from the Transverse Ranges; and the Garlock Fault, which divides the Mohave Desert Province from the Tehachapi Range. The study area technically resides on the far western tip of the Mojave Desert Province but is directly bordered by the foothills of the Tehachapi Ranges to the north and northeast, and the foothills of the Western Transverse Ranges to the south and southwest. Each of these provinces has a unique set of geographical, tectonic, geological, and biological characteristics that strongly influence landscape and plant community characteristics within the study area including the occurrence, quality, and diversity of the perennial bunchgrass community.

5.2.1.2 Climate

The junction of the Tehachapi Ranges and Western Transverse Ranges creates a 'notch' just west of the study area that has several effects on the local climate. High winds are common across the study area throughout the year due to channeling of coastal winds through the notch. These winds undoubtedly cause accelerated erosion and drying of exposed ridge top soils. This notch also appears to influence the local rainfall levels and associated plant communities across a gradient that extends from a few miles west of the study area to a few miles east of the study area. Though rainfall data were not obtained for this report, the drop in rainfall across the site from west to east is apparent in the change in plant communities. Just west of the study area, the dominant plant communities are introduced annual grasslands, oak woodlands, and chaparral. Within the central study area, the dominant habitat is perennial bunchgrass community and annual grasslands. Less than a mile east of the study area, the dominant habitat is desert scrub. The rainfall gradient across the study area is more gradual than in regions north and south of the study area that are blocked by tall mountains of the Tehachapi and Western Transverse Ranges. These areas have a more dramatic rainshadow effect and, typically, a more abrupt transition from mountain forest and scrub communities to desert scrub communities. The more gradual rainfall gradient across the study area region, and the specific rainfall patterns within the study area, appear to be significant factors influencing the presence and quality of the perennial bunchgrass community within the study area.

5.2.1.3 Geology and Geomorphology

The geologic formations within and adjacent to the study area provide a rough geologic and geographic history of the region going back more than 300 million years (see full discussion in Section 3.0). This history shows a beginning as a deep marine environment; followed by metamorphosis of the sea floor deposits into limestone beds; uplift of these beds by intruding

Tehachapi granite; eruption of andesite volcanic flows along the young San Andreas Fault Zone; slow uplift of the area between the Tehachapis and Transverse Ranges (western Mohave Block) creating first a shallow marine or estuarine environment, followed by a mixed continental and lake environment; and, finally, the extensive disgorgement of alluvium (mostly granitic) from the Tehachapis and Transverse Ranges. These geologic formations each have distinct landscape characteristics and soils that strongly influence the diversity and abundance of plant species.

The predominant geologic formations in the broad central and southeastern regions of the study area include 12 million year old Continental Deposits and 100,000 to one million year old Terrace Deposits (see Figure 3.3, Table 3.1). The perennial bunchgrass community occurs primarily on these formations. Together, these formations form a distinct, unified geomorphic feature that includes a series of generally west to east oriented ridges and intervening drainages and associated alluvial terraces. The terrain and orientation of the ridges creates a natural set of distinct landscape positions within the perennial bunchgrass community including alluvial plains, floodplains, south-facing slopes, ridge tops, north-facing slopes, and terrace tops. Limestone soils are also included as an additional landscape position since the associated plant species on these soils are so distinct. These landscape positions have differences in slope, aspect, soils, and disturbance that strongly influence plant species richness and cover. Soils on the ridge tops and upper slopes are thin, excessively drained gravelly and coarse sandy loams. Soils on the intervening floodplains, lower hill slopes, and terrace tops have a similar texture but are deeper.

5.2.1.4 Regional Flora

Each of the three geologic provinces in the region has distinct floristic characteristics due to differences in geology, climate, and other factors. The immediate region of the study area is located where the floras of these three provinces merge. It is also a region where the floras of the mountains of southern and northern California merge, and, to a lesser degree, the floras of the coastal regions and the Great Central Valley. This merging of different floras is evident in the large number of native wildflower species present in the study area. The richness of perennial bunchgrass species, with six species present, is due to the merging of desert, southwest, and interior lowland California bunchgrass species.

5.2.2 Perennial Bunchgrass Characteristics

5.2.2.1 General Community Description

The perennial bunchgrass community is characterized by a relatively high cover of native perennial bunchgrasses and wildflowers, and a conspicuously low cover of introduced annual grasses. A total of six bunchgrass species occur in the study area. Foothill needlegrass (*Nasella cernua*) and one-sided bluegrass (*Poa secunda* ssp. *secunda*) are the dominant species within the bunchgrass community. Big squirreltail (*Elymus multisetus*) and desert needlegrass (*Achnatherum speciosum*) are sub-dominants. Two other bunchgrass species, small-flowered melic grass (*Melica imperfecta*) and giant wild rye (*Leymus condensatus*), occur sporadically on the site but neither is a significant component of the perennial bunchgrass community. The native sod-forming grass creeping wildrye (*Leymus triticoides*) occurs on low-lying floodplains.

Common native wildflowers within the perennial bunchgrass community include devil's lettuce (*Amsinckia tessellata* var. *tessellata*), purple owl's-clover (*Castilleja exserta* ssp. *exserta*), California poppy (*Eschscholzia californica*), California goldfields (*Lasthenia californica*), common lomatium (*Lomatium utriculatum*), miniature lupine (*Lupinus bicolor*), California cliff-aster (*Malacothrix californica*), rusty popcornflower (*Plagiobothrys nothofulvus*), white-tip clover (*Trifolium albopurpureum* var. *albopurpureum*), pin-point clover (*Trifolium gracilentum* var. *gracilentum*), and silver puffs (*Uropappus lindleyi*). More than 60 other wildflower species also occur within the community (see plant list in Appendix 4-B). During early to mid spring, there are showy displays of these native wildflowers. In late spring and early summer, the wildflowers decline and perennial bunchgrasses become more prominent.

There are only a limited number of non-native forbs within the bunchgrass community. Red-stem filaree (*Erodium cicutarium*) is the only dominant. There are stands of non-native annual grassland intermixed within the bunchgrass community. Common species include red brome (*Bromus madritensis* ssp. *rubens*), cheatgrass (*Bromus tectorum*), ripgut (*Bromus diandrus*), soft chess (*Bromus hordeaceus*), and wild oats (*Avena fatua*). These grasslands typically dominate only in areas with deeper, accumulated soils such as floodplains and lower hill slopes.

5.2.2.2 Description of Perennial Bunchgrass Species

Four perennial bunchgrass species occur as either dominants or sub-dominants within the perennial bunchgrass community. The general distribution and habitat characteristics of these species are described below.

Nodding Needlegrass (*Nasella cernua*)

Nodding needlegrass historically occurred as a common to dominant species in drier bunchgrass communities in the Transverse Ranges, Peninsular Ranges, and South Coast Ranges in southwestern California, and the northern Baja Peninsula in Mexico. It also occurred in isolated pockets further north in the interior North Coast Ranges. It occurs in more arid climates than the more northern purple needlegrass (*Nasella pulchra*), typically in areas with less than 12 to 14 inches of annual rainfall. The decline of the species is due to competition with non-native annual grasses. The species currently occurs only sporadically, typically as scattered individuals or small stands within non-native annual grasslands. Large, dense stands such as that found in the study area are very rare. There have been efforts to list the species due to its current rarity and endangerment (Dremann, 2004).

Within the study area, nodding needlegrass is a dominant on upper southern slopes, ridge tops, and terrace tops on Continental Deposits and Terrace Deposits in the central and southeastern regions of the study area. Nodding needlegrass is considered a "climax" grassland species and large clumps were occasionally observed in the study area.

One-sided Bluegrass (*Poa secunda* ssp. *secunda*)

One-sided bluegrass is a widespread species, ranging from Alaska through California to northwestern Mexico and east to the Rocky Mountains. It also occurs in South America. The species is a common component of bunchgrass communities in the western United States. Like

other bunchgrass species, one-sided bluegrass has experienced significant declines due to competition with invasive annual grasses. While the species remains more common than nodding needlegrass, it typically occurs now as scattered individuals or isolated stands within introduced annual grasslands. Large dense stands such as that found in the study area are uncommon.

Within the study area, one-sided bluegrass is a dominant on northern slopes, ridge tops, and terrace tops on Continental Deposits and Terrace Deposits in the central and southeastern regions of the study area. Isolated stands also occur on north slopes within areas mapped as Santa Margarita Formation in the southwest and north central regions of the study area.

Big Squirreltail (*Elymus multisetus*)

Big squirreltail grass is also a widespread bunchgrass species, ranging from Washington through California and east to the Rocky Mountains. More locally, it occurs occasionally to commonly in the foothills of Kern County as a component of grassland and oak woodland communities, where it is typically found on open rocky or sandy soils. Little information is available on the historic or current status of the species in terms of abundance and decline.

Within the study area, big squirrel tail occurs in scattered clusters primarily on upper slopes and terrace tops on Continental Deposits and Terrace Deposits in the central and southeastern regions of the study area. Big squirreltail grass is considered a "colonizer" grassland species.

Desert Needlegrass (*Achnatherum speciosum*)

Desert needlegrass is a robust desert or arid climate species, restricted to areas with low annual rainfall. It is fairly widespread, extending from the lower slopes of the Tehachapi Mountains east to Colorado and south to Arizona and Northern Mexico. It also occurs in South America. It typically occurs on coarse-textured soils, often on alluvial fans. Desert needlegrass occurs in a variety of desert habitat types including the desert scrub habitat that begins just east of the study area. Its occurrence in the study area within a strict perennial bunchgrass community is unusual and represents the westernmost range limit of the species in the region. This species apparently has not experienced the same dramatic declines as nodding needle grass and purple needle grass since it grows in areas with less competition from introduced annual grasses. Cheatgrass (*Bromus tectorum*), an introduced annual grass common in arid regions of the west, is of concern as a competitor (Rafferty and Young 2002).

Within the study area, desert needlegrass occurs on thinner, more sandy and droughty soils, primarily on ridge tops and upper slopes on Continental Deposits and Terrace Deposits in the central and southeastern regions of the study area. Desert Needlegrass is considered a "climax" grassland species and large clumps were common in the study area.

5.2.2.3 Plant Community Classification

The two most commonly used classification systems for California's terrestrial plant communities are Holland's *Preliminary Descriptions of the Terrestrial Natural Communities of California* (1986) and Sawyer and Keeler-Wolf's *A Manual of California Vegetation* (1995).

These two classification systems follow different approaches. Holland identifies different plant communities based on a common set of landscape characteristics and associated plant species. Sawyer and Keeler-Wolf identify vegetation series dominated by one or more specific plant species. The Holland classification system is used as a reference for plant communities for this report given its broader, more ecologically-based approach to classification.

The perennial bunchgrass community in the study area is a composite of three different herbaceous Holland plant community types. Valley Needlegrass Grassland, One-sided Bluegrass Grassland, and Wildflower Fields. These three community types occur together primarily on thin soils along ridges, upper hill slopes, and terrace tops. Two other community types are interspersed within the bunchgrass community. Non-native Annual Grassland occurs primarily in areas with deeper, accumulated soils on lower south-facing slopes and on floodplains. Valley Wildrye Grassland occurs primarily on seasonally moist floodplains and lower north-facing slopes. Table 5.2 summarizes these community types and also compares them to Sawyer and Keeler-Wolf vegetation series for reference.

Valley Needlegrass Grassland, One-sided Bluegrass Grassland, and Wildflower Fields are all identified as "sensitive" plant communities by the State of California based on statewide rarity and continuing decline. Occurrences of these communities are included in the CDFG's Natural Diversity Data Base (CNDDB 2004). Valley Wildrye Grassland is not a sensitive plant community. Non-native Annual Grassland is an introduced plant community.

Table 5.2. Individual plant community types within the perennial bunchgrass community on the Centennial Specific Plan Project Site.

Holland Plant Community	Description	CDFG Status	Related Sawyer and Keeler-Wolf Series
Valley Needlegrass Grassland	A native grassland dominated by perennial, tussock-forming purple needlegrass (*Nasella pulchra*) in northern and central California and nodding needlegrass in southern California; native and introduced annuals occur between the perennials, often exceeding the bunchgrass cover. One-sided blue grass is often a component of this community. Formerly extensive around Sacramento, San Joaquin, Salinas Valley, and the Los Angeles Basin but now much reduced.	Sensitive Plant Community	Foothill Needlegrass Series
One-sided Bluegrass Grassland (also Pine Bluegrass Grassland)	A native grassland dominated by one-sided bluegrass with high cover and constancy of several native forbs. Often on toe slopes, protected slopes, and clay flats. Occurs at lower elevations primarily along the inner South Coast Ranges.	Sensitive Plant Community	One-sided Bluegrass Series
Wildflower Field	An amorphous grab bag of herb-dominated types noted for conspicuous annual wildflower displays; dominance varies from site to site and from year to year at a particular site. Usually on fairly poor sites (droughty, low in nutrients) with reduced competition from annual grasses. Associated habitats include grasslands and oak woodlands.	Sensitive Plant Community	No related series.
Valley Wildrye Grassland	A dense prairie sod dominated by creeping wildrye. Occurs on low-lying, moist sites, often adjacent to riparian habitat or freshwater marsh. Scattered widely throughout the Central Valley, other interior valleys and the surrounding lower foothills.	No Status	Creeping ryegrass series
Non-native Grassland	A dense to sparse cover of primarily introduced annual grasses. Often with numerous associated species of showy, native wildflowers, especially in years of favorable rainfall.	No Status	California annual grassland series

5.3 Methods

Field data were collected during the 2003 and 2004 field seasons. The 2003 surveys focused on determining the general distribution of the perennial bunchgrass community within the study area and its relative habitat quality on different landforms and landscape positions. The 2004 surveys focused on clarifying the local, distribution patterns of bunchgrass community and non-native annual grasslands within areas identified from the 2003 survey data as high potential habitat for bunchgrass community. The methods for each year are summarized separately below. Field data was collected using standard vegetation community sampling metholdogy (Mueller-Dombois, and Ellenberg, 1974).

5.3.1 2003 Field Surveys

During 2003, field sampling was conducted within seven different dominant landscape positions present in the study area. During earlier surveys, John Vollmar, senior botanist for the study, had noted apparent differences in plant species diversity and richness among these landscape positions especially relating to cover and richness of native versus non-native grasses and forbs versus bunchgrasses. The sampled landscape positions included:

- Disturbed Alluvial Plains
- Floodplains
- South-facing Slopes
- Ridge Tops
- North-facing Slopes
- Terrace Tops
- Limestone Soils

Field work was conducted April 28-29, 2003 by John Vollmar and John Hale. Sampling was conducted within fifty-five 10 x 3 meter plots placed along ten transects traversing the study area (Figure 5.1). Plots locations were stratified by landscape position. Actual plot locations were randomized by selecting a point while walking along the transect and then pacing fifty steps along the transect to the plot location. Two types of data were collected within each plot. First, all plant species within the entire plot were recorded. Then, three one-meter square quadrats were placed along the center line of the plot (one in the center and one at each end) and the absolute cover of each species present within each quadrat was recorded. Together, these data provided information on species richness and cover. Table 5.3 summarizes the number of plots per landscape position.

John Vollmar and Michael Weiler entered all field data into a spreadsheet, performed basic analyses, and prepared the report. Data were separated by landscape position. Within each position, plant species were separated by plant type including native forbs, native annual grasses, native perennial bunchgrasses, native perennial sod grasses, native shrubs, non-native forbs, and non-native annual grasses. Relative cover values were calculated from absolute cover. Basic statistics were generated using statistical software (MiniTab Version 13) for each landscape position and plant type within each position. Descriptive statistics and Mann-Whitney significance tests were generated for each landscape position by plant type.

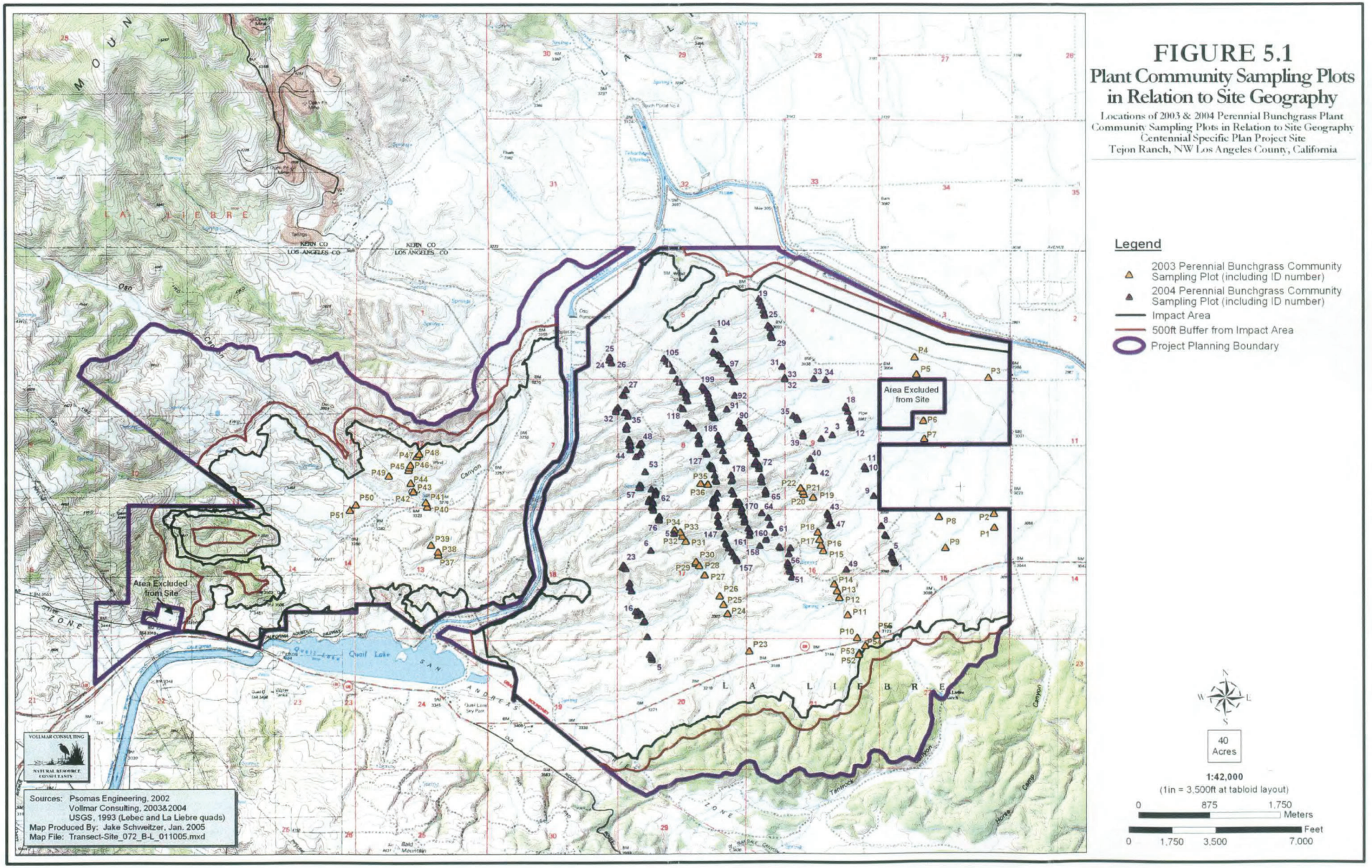


FIGURE 5.1
Plant Community Sampling Plots in Relation to Site Geography
Locations of 2003 & 2004 Perennial Bunchgrass Plant Community Sampling Plots in Relation to Site Geography
Centennial Specific Plan Project Site
Tejon Ranch, NW Los Angeles County, California
Legend
2003 Perennial Bunchgrass Community Sampling Plot (including ID number)
2004 Perennial Bunchgrass Community Sampling Plot (including ID number)
Impact Area
500ft Buffer from Impact Area
Project Planning Boundary
Area Excluded from Site
Area Excluded from Site
Quail Lake
LA LIEBRE
SAN ANDREAS
FAULT ZONE
KERN CO
LOS ANGELES CO
VOLLMAR CONSULTING
NATURAL RESOURCE CONSULTANTS
Sources: Psomas Engineering, 2002
Vollmar Consulting, 2003&2004
USGS, 1993 (Lebec and La Liebre quads)
Map Produced By: Jake Schweitzer, Jan. 2005
Map File: Transect-Site_072_B-L_011005.mxd
N
W
E
S
40 Acres
1:42,000
(1in = 3,500ft at tabloid layout)
0 875 1,750
Meters
Feet
0 1,750 3,500 7,000

Table 5.3 Number of plots per landscape position sampled in the perennial bunchgrass plant community study conducted in 2003 and 2004 by Vollmar Consulting, Centennial Specific Plan Project Site, Los Angeles County, California

Landscape Position	Number of Plots, 2003	Number of Plots, 2004
Disturbed Alluvial Plain	9	0
Floodplains	9	20
North-facing Slopes (Mid-slope)	9	N/A
North-Facing, Lower, Concave Slopes	N/A	26
North-Facing, Lower, Convex Slopes	N/A	19
North-Facing, Upper, Concave Slopes	N/A	23
North-Facing, Upper, Convex Slopes	N/A	36
Ridge tops	8	56
Terrace Tops	4	0
South-Facing Slopes (Mid-slope)	9	N/A
South-Facing, Upper, Convex Slopes	N/A	33
South-Facing, Upper, Concave Slopes	N/A	18
South-Facing, Lower, Convex Slopes	N/A	16
South-Facing, Lower, Concave Slopes	N/A	31
Limestone Soils	6	0
Total Number of Plots:	**55**	**278**

5.3.2 2004 Field Surveys

Field sampling in 2004 was restricted to the weathered ridge system in the central-eastern region of the study area. This landform was identified from the 2003 field data as supporting high-quality perennial bunchgrass community. The 2004 field surveys continued the study of species distribution across landscape positions but further stratified the landscape positions and focused primarily on the distribution of perennial bunchgrasses versus non-native annual grasses to better describe the quality of the bunchgrass community, more precisely map its local distribution within identified habitat, and compare its quality to other known bunchgrass stands in the state.

Ten landscape positions were surveyed in 2004. Two of the 2003 landscape positions (disturbed alluvial plains and limestone soils) were not surveyed in 2004. Also, the north- and south-facing slopes were further stratified by slope position (upper and lower) and topography (convex and concave) to assess plant species distribution in relation to microtopography. Thus, the following ten landscape positions were surveyed:

- Floodplains
- North-Facing, Lower, Concave Slopes
- North-Facing, Lower, Convex Slopes
- North-Facing, Upper, Concave Slopes
- North-Facing, Upper, Convex Slopes
- Ridge tops
- South-Facing, Lower, Concave Slopes
- South-Facing, Lower, Convex Slopes
- South-Facing, Upper, Concave Slopes
- South-Facing, Upper, Convex Slopes

Disturbed alluvial plains were not included since the 2003 data clearly showed that bunchgrass species do not occur on this landform. Limestone soils were not included since these soils occur in a few localized areas mostly outside of the 2004 study region.

Field sampling was conducted on June 17, 2004 by John Vollmar, Gretchen Vos, Jeffrey Congero, and Ayzik Solomeshch. Sampling was conducted along parallel transects laid out perpendicular to the ridgelines (roughly north to south) and separated by 300 meters. Transect locations were loaded into a professional GPS unit (Trimble GeoXT) which was used to navigate along transects. Data were collected within 278 10 x 3 meter plots placed in targeted landscape positions along the transects. Surveyors placed plots in these positions as they were encountered along a transect. In some cases, surveyors moved laterally away from transects to establish plots in under-represented positions (especially for upper concave and lower convex slope positions). Table 5.3 summarizes the number of plots per landscape position. Table 5.15, in Appendix 5, summarizes transects, plots, and landscape positions. Environmental and floristic data were collected within each plot. Environmental data included landscape position, aspect, percent slope, slope position, microtopography, soil condition and parent material. Floristic data included relative percent cover for individual perennial bunchgrass and annual grass species, combined forbs, and bare ground. Transects and plot locations are shown on Figure 5.1.

Upon completion of the sampling, Gretchen Vos entered all field data into a spreadsheet and performed basic statistical analyses. Data were separated by landscape position for each perennial and annual grass species, combined forb species, and bare ground. Basic statistics were generated using statistical software (MiniTab Version 13). Descriptive statistics and Mann-Whitney significance tests were generated for each landscape position by individual grass species, combined forb species, and bare ground.

Mean cover values were used to assess and describe the distribution of individual and combined bunchgrass species and introduced annual grasses within the study site. The threshold for determining dominance of combined perennial bunchgrasses versus annual grasses was 20% relative cover. For individual bunchgrass species, high potential habitat for nodding needle grass and one-sided bluegrass included landscape positions with >10% mean cover values for these species. These species are common with relatively continuous distributions across the landscape. High potential habitat for big squirreltail and desert needlegrass included landscape positions with >1% mean cover values for these species. These species are less common than the other two species and have highly clustered distributions across the landscape. [Standardized criteria for determining thresholds of cover dominance in grassland communities are not well established in the literature. The relative cover thresholds are based on conservative estimates based on field observations].

Soil samples were randomly collected at 100 of the 278 plots in all ten landscape positions. Table 5.16 in Appendix 5 lists the soil sample plot locations. Soil samples were collected from the top horizon (upper 6") from one location in each plot. Forty-six of the 100 samples, stratified by landscape position, were sent to a lab for analysis. Soils were analyzed for percent organic matter, major and minor cations, cation exchange capacity and pH. Mean values were calculated for percent organic matter, cation exchange capacity, and pH for each landscape position. Basic statistics were generated using statistical software (MiniTab Version 13).

5.4 Results

The field surveys conducted in 2003 and 2004 served different goals. As described above, the 2003 surveys focused on determining the general distribution and relative habitat quality of the perennial bunchgrass community throughout the study area while the 2004 surveys focused on clarifying the local distribution patterns of bunchgrasses, forbs and non-native annual grasses within mapped high-quality perennial bunchgrass habitat. Given these different goals and associated data collection methods, results for the two years are presented separately below. The interpretation of these results is integrated in the Discussion section.

5.4.1 2003 Field Surveys

Table 5.4 lists all plant species recorded in sampled plots. Species are separated by plant type (i.e. native forbs, native perennial bunchgrass, etc.). The abundance of each species within each landscape position is noted as either dominant (>10% mean cover), subdominant (2-10% mean cover), or uncommon (<2% mean cover). Table 5.5 summarizes the means for species richness, absolute cover, and relative cover by plant type and landscape position. The means for bare soil by landscape position are also included with the absolute cover values. Appendix 5 includes five tables (Table 5.9-5.13) summarizing descriptive statistics and Mann-Whitney tests for significance for richness, relative plant cover, and bare soil cover. Most of differences were found to be very significant (0.01 confidence level) to significant (0.05 confidence level).

Mean native richness and cover was high on south-facing slopes, ridge tops, north-facing slopes, and limestone soils and low on disturbed alluvial plains and floodplains. Terrace tops were mixed with a high mean cover of native species but a low mean richness.

Mean non-native richness and cover values were generally the inverse of the native values, with high non-native values recorded on disturbed alluvial plains and floodplains and low values recorded on south-facing slopes, ridge tops, north-facing slopes, and terrace tops. Limestone soils had a low cover of non-native plants but a high number of species due to the presence of a several non-native annual grass species in most plots. Most of the non-native cover on south-facing slopes, ridge tops, north-facing slopes, and terrace tops came from one species, red-stem filaree. Among native species, mean richness and cover of native wildflowers were both high on south- facing slopes and limestone soils and low on disturbed alluvial plains and floodplains.

Ridge tops and north-facing slopes had high wildflower richness but moderate relative cover. Terrace tops had low wildflower richness and moderate relative cover. Mean richness and cover of native perennial bunchgrasses were high on ridge top, north-facing slopes, and terrace tops, low to moderate on south-facing slopes and limestone soils, and very low on floodplains. No perennial bunchgrasses were recorded on disturbed alluvial plains.

Interestingly, the richness and cover of native bunchgrasses was inversely correlated with the richness and cover of native wildflowers on most landscape positions. This is most likely due to competition for space. On all landscape positions except disturbed alluvial plains and floodplains, the combined relative cover of native wildflowers and bunchgrasses was around 50-60%. Where the cover of native wildflowers was highest (south-facing slopes and limestone

soils), the cover of native bunchgrasses was lowest; where the cover of native wildflowers was lowest (ridge tops and north-facing slopes), the cover of native bunchgrasses was highest. Where the cover of native wildflowers was moderate (terrace tops), the cover of native bunchgrasses was also moderate. These correlations did not occur on disturbed alluvial plains and floodplains. Native bunchgrasses were generally absent on these surfaces and native wildflowers had a low cover and richness.

Non-native annual grasses had the highest richness on limestone soils and floodplains, moderate richness on disturbed alluvial plains and south-facing slopes, and lowest richness on ridge tops, north-facing slopes and terrace tops. The highest relative cover was recorded on south-facing slopes, moderate covers were recorded on floodplains and limestone soils, and low covers were recorded on disturbed alluvial plains, ridge tops, north-facing slopes, and terrace tops.

Perennial sod grass (i.e. creeping wildrye) was only recorded on floodplains. Native annual grasses and native shrubs were each recorded on five of the seven landscape positions but in such low cover values that no conclusions can be made.

The cover of bare soil varied greatly among the landscape positions. The cover values were directly associated with soil depth on the various landscape positions. The thin, weathered ridge top soils had the highest mean cover of bare soil. Adjacent south-facing and north-facing slopes were moderately bare. These surfaces are weathered like the ridge tops but accumulate some deeper soils more amenable to plant growth, especially when the slopes are concave. Disturbed alluvial plains, terrace tops, and limestone soils all had moderately low mean covers of bare soils. All of these landscape positions have flat to gentle sloping surface with well-developed soils and fairly dense plant growth. Floodplains had the lowest mean cover of bare soil. Floodplains have the deepest soils in the study area and support dense plant growth.

5.4.2 2004 Field Surveys

Table 5.6 lists the mean relative covers across different landscape positions for individual and combined perennial bunchgrass species, combined annual grass species, combined forb species and bare ground. Numbers in the table are color-coded to show high, moderate, and low cover values for each species or plant group. These cover classes were used to develop perennial bunchgrass and annual grass distribution maps. Appendix A includes three tables (Tables 5.16 – 5.18) that summarize descriptive statistics and Mann-Whitney tests for significance of the mean values. Table 5.7 shows the frequency of occurrence of the four perennial bunchgrass species within sampled plots across different landscape positions. This table demonstrates the broad distributions of nodding needlegrass and one-sided bluegrass versus the more clustered distributions of big squirreltail and especially desert needlegrass. Table 5.8 presents mean data on soil characteristics at different landscape positions based on lab analysis of soil samples.

Mean cover values for combined perennial bunchgrass species and introduced annual grasses followed similar patterns as for the 2003 data, with the highest covers of perennial bunchgrasses on ridge tops and upper slopes and the highest covers of annual grasses on lower slope and floodplain positions. However, increased stratification of landscape positions on the north-facing and south-facing slopes revealed a more intricate and exquisite distribution pattern

between these two competing groups of plants. Table 5.6 shows the inverse relationship between mean cover values for these two groups across the landscape gradient from a floodplain, up and over a ridge top from north to south, and back down to a floodplain. The abundance of each group was inversely correlated at each landscape position. Where the perennial bunchgrass cover was highest, the annual grass cover was the lowest and vice versa. Furthermore, these cover values roughly followed a normal curve across the landscape gradient from floodplain to floodplain. This normal inverse relationship is clearly shown in Graph 5.1.

The four perennial bunchgrass species also showed normal abundance curves across sequential landscape positions though each species had a unique distribution pattern. These different patterns are shown by color-coding in Table 5.6 and graphically in Graph 5.2. Nodding needlegrass is most abundant on ridge tops and upper south-facing convex slopes, while one-sided bluegrass is most abundant on upper and lower north-facing slopes (convex and concave) with moderate abundance on ridge tops. Big squirreltail, a sub-dominant species with a clustered distribution, is most abundant on north-facing upper slopes and lower convex slopes. Desert needlegrass, also a sub-dominant species with a highly clustered distribution, is most abundant on ridge tops and north-facing upper convex slopes.

The soils across the different landscape positions change from thin, gravelly exposed soils on ridge tops to deeper accumulated loamy soils on lower slopes and floodplains. The results from the soil sample analyses were less significant than results from floristic data (Table 5.8). Mean percent organic matter was marginally higher on floodplains and lower slope positions. This is expected since these are accumulation zones. Cation exchange capacity (CEC) is a measurement of a soil's capacity to hold exchangeable cations (i.e. nutrients important for plant growth) such as potassium, magnesium, calcium, sodium, and hydrogen. CEC is directly related to soil texture and percent organic matter. Clay soils typically have a higher CEC, and soils with high organic matter content also have a higher CEC. Coarse textured soils typically have lower CEC. A low CEC value is 10 and under. A high CEC value is typically greater than 40. The recorded mean CEC values at all landscape positions is considered low. The mean CEC was generally highest in the floodplain and lower slope positions and lowest in the upper slope positions. The mean CEC for ridge tops, however, did not follow this trend and was significantly higher than for the adjacent upper slopes. Mean soil pH values ranged from 7.42 to 7.62, all within the slightly alkaline range. The elevated pH values are likely related to low levels of calcium from limestone incorporated in the alluvial parent material.

Table 5.4 Plant species identified during spring 2003 perennial bunchgrass plant community sampling conducted by Vollmar Consulting on the Centennial Specific Plan Project Site, Los Angeles County, California. D = Dominant (>10% mean cover); S = Subdominant (2-10% mean cover); U = Uncommon (<2% mean cover).

Scientific Name	Acronym	Disturbed Alluvial Plain	Floodplain	S-Facing Slope	Ridge Top	N-Facing Slope	Terrace Tops	Limestone Soils
Native Forbs								
Achyrachaena mollis	ACMO			U				U
Agoseris heterophylla	AGHE			U	U	U		
Agoseris retrorsa	AGRE	U				U		
Amsinckia menziesii var. intermedia	AMMEI	U	U					
Amsinckia menziesii var. menziesii	AMMEM		U					
Amsinckia tessellata var. tessellata	AMTET	S	S	U	U	S	D	S
Ancistrocaphus filagineus	ANFI							U
Asclepias californica	ASCA			U				
Asclepias sp.	ASSP			U				
Astragalus didymocarpus var. didymocarpus	ASDID							S
Astragalus douglasii var. douglasii	ASDOD		U					
Astragalus purshii var. tinctus	ASPUT				U		U	
Astragalus sp.	ASSP					U		
Balsamorhiza deltoidea	BADE					U		
Calandrinia ciliata	CACI			U	U	U		
Calochortus sp.	CASP							U
Calystegia occidentalis ssp. fulcrata	CAOCF			U	S	U		
Camissonia campestris ssp. campestris	CACAC	U			U	U		
Castilleja exserta ssp. exserta	CAEXE	U	U	U	U	U	U	U
Chaenactis glabriuscula var. glabriuscula	CHGLG			S	U			
Chaenactis xantiana	CHXA	U		U	U	U		
Chamaesyce albomarginata	CHAL	U		S	U		U	
Claytonia perfoliata ssp. perfoliata	CLPEP					U		U
Collinsia bartisaefolia var. davidsonii	COBAD					U		
Cryptantha sp.	CRSP			U	U	U	U	
Dichelostemma capitatum ssp. capitatum	DICAC			U	U	U	U	U
Eremocarpus setigerus	ERSE		U	U	U	U	U	
Eriogonum sp.	ERSP	U		U	U	U		
Erodium macrophyllum	ERMA							S
Eschscholzia californica	ESCA	U		S	U	U	U	
Gilia aliquanta ssp. aliquanta	GIALA			U		U		
Gilia breccarium ssp. breccarium	GIBRB	U				U		
Guillenia lemmonii	GULE							U
Helianthus annuus	HEAN							U
Lasthenia californica	LACA	U	U	S	S	U		U
Layia platyglossa	LAPL							D
Lepidium nitidum	LENI			U	U	U		S
Linanthus dichotomus	LIDI			U	U	U		
Linanthus liniflorus	LILI		U	U	U		U	
Linanthus sp.	LISP	U	U		U		U	
Lomatium utriculatum	LOUT	U	U	U	U	S	U	S
Lotus wrangelianus	LOWR			U				U
Lupinus bicolor	LUBI	S	D	S	U	S	D	
Lupinus excubitus var. austromontanus	LUEXA				U	U		
Lupinus formosus var. formosus	LUFOF	U				U		
Macaranthera canescens	MACA1	U		S	U	U	U	
Macaranthera sp?	MACA3				U			
Malacothrix californica	MACA2	U	U	U	U			

Scientific Name	Acronym	Disturbed Alluvial Plain	Floodplain	S-Facing Slope	Ridge Top	N-Facing Slope	Terrace Tops	Limestone Soils
Malacothrix sp.	MASP					U		
Marah fabaceus	MAFA	U						
Mentzelia albicaulis	MEAL	U			U	U		
Microseris sylvatica	MISY			U	U	U		
Monolopia lanceolata	MOLA							D
Pectocarya linearis ssp. ferocula	PELIF	S			U	U		
Pectocarya setosa	PESE			U				
Phacelia ciliata	PHCI							D
Phlox gracilis	PHGR		U					
Plagiobothrys nothofulvus	PLNO		U	U		U	U	
Plagiobothrys sp.	PLSP		U			U		
Platystemon californicus	PLCA		U					
Sidalcea malvaeflora ssp. sparsifolia	SIMAS		U			U		
Thysanocarpus curvipes	THCU					U		
Trifolium albopurpureum var. albopurpureum	TRALA		U	U	U	U		
Trifolium gracilentum var. gracilentum	TRGRG		S	S		U	U	
Trifolium wildenovii	TRWI		U					
Yellow woolly comp	UNCO1				U			
Unknown composite	UNCO3					U		
Unknown composite	UNCO4							U
Unknown forb	UNFO1				U			
Uropappus lindleyi	URLI	U	U	U	U		U	
Vicia sp.	VISP							U
Native Annual Grasses								
Vulpia microstachys var. microstachys	VUMIM	U	U	U		U		U
Native Perennial Bunch Grasses								
Elymus multisetus	ELMU					U		
Nassella pulchra	NAPU			U	U	U	U	U
Poa secunda ssp. secunda	POSES		U	U	D	D	D	S
Native Perennial Sod Grasses								
Leymus triticoides	LETR		U					
Native Shrubs								
Chrysothamnus nauseosus	CHNA	S			U			U
Chrysothamnus-like shrub?	UNCO2			U	U	U		
Isocoma acradenia	ISAC			U	U	U		
Non-Native Forbs								
Erodium cicutarium	ERCI	D	D	D	D	D	D	D
Descurainia sophia	DESO	U	U					
Hirschfeldia incana	HIIN	U		U	U			U
Lupinus microcarpus var. microcarpus	LUMIM	U						S
Vicia benghalensis	VIBE				U	U	U	
Non-Native Annual Grasses								
Avena fatua	AVFA	U	U	S	U			U
Bromus diandrus	BRDI		U					
Bromus hordeaceus	BRHO		U	U				S
Bromus madritensis ssp. rubens	BRMAR	U	S	S	U	U	S	S
Bromus tectorum	BRTE	U	S	U	U	U	U	U
Hordeum murinum ssp. leporinum	HOMUL		S					U
Secale cereale	SECE	U		U				

Table 5.5 Mean values from 2003 plant community sampling for plant species richness, absolute cover, and relative cover. Centennial Specific Plan Project Site, Los Angeles County, California.

SPECIES RICHNESS

Landscape Position	Native Forbs	Native Annual Grasses	Native Perennial Bunch Grasses	Native Perennial Sod Grasses	Native Shrubs	TOTAL NATIVE PLANTS	Non-Native Forbs	Non-Native Annual Grasses	TOTAL NON-NATIVE PLANTS	TOTAL ALL PLANTS
Disturbed Alluvial Plain	5.44	0.44	0.00	0.00	0.22	**6.11**	2.44	2.22	**4.67**	**10.78**
Flood Plain	7.00	0.89	0.33	0.11	0.00	**8.33**	1.11	3.00	**4.11**	**12.44**
S-Facing Slope	10.56	0.22	1.33	0.00	0.22	**12.33**	1.22	2.11	**3.33**	**15.67**
Ridge Top	10.50	0.00	1.88	0.00	0.50	**12.88**	1.38	1.38	**2.75**	**15.63**
N-Facing Slope	12.11	0.11	1.78	0.00	0.22	**14.22**	1.22	1.56	**2.78**	**17.00**
Terrace Top	6.00	0.00	1.80	0.00	0.00	**7.80**	1.20	1.20	**2.40**	**10.20**
Limestone Soils	10.67	0.33	1.00	0.00	0.33	**12.33**	2.00	3.67	**5.67**	**18.00**

ABSOLUTE PLANT COVER AND BARE SOIL

Landscape Position	Native Forbs	Native Annual Grasses	Native Perennial Bunch Grasses	Native Perennial Sod Grasses	Native Shrubs	TOTAL NATIVE PLANTS	Non-Native Forbs	Non-Native Annual Grasses	TOTAL NON-NATIVE PLANTS	TOTAL ALL PLANTS	BARE SOIL
Disturbed Alluvial Plain	11.00	0.30	0.00	0.00	2.04	**13.33**	79.67	2.70	**82.37**	**95.70**	**8.67**
Flood Plain	22.56	0.96	0.78	0.93	0.00	**25.22**	76.63	10.30	**86.93**	**112.15**	**3.15**
S-Facing Slope	38.22	0.07	3.00	0.00	0.37	**41.67**	31.63	14.44	**46.07**	**87.74**	**28.44**
Ridge Top	14.75	0.00	13.42	0.00	1.04	**29.21**	21.54	1.38	**22.92**	**52.54**	**50.42**
N-Facing Slope	22.41	0.11	15.81	0.00	0.56	**38.89**	34.00	3.22	**37.22**	**76.11**	**26.67**
Terrace Top	38.33	0.00	16.47	0.00	0.00	**54.80**	43.67	6.33	**50.00**	**104.80**	**10.13**
Limestone Soils	56.17	0.06	2.00	0.00	0.28	**58.50**	23.72	8.83	**32.56**	**91.06**	**12.00**

RELATIVE PLANT COVER

Landscape Position	Native Forbs	Native Annual Grasses	Native Perennial Bunch Grasses	Native Perennial Sod Grasses	Native Shrubs	TOTAL NATIVE PLANTS	Non-Native Forbs	Non-Native Annual Grasses	TOTAL NON-NATIVE PLANTS	TOTAL ALL PLANTS
Disturbed Alluvial Plain	11.49	0.31	0.00	0.00	2.13	**13.93**	83.25	2.83	**86.07**	**100.00**
Flood Plain	20.12	0.86	0.69	0.83	0.00	**22.49**	68.33	9.18	**77.51**	**100.00**
S-Facing Slope	43.56	0.08	3.42	0.00	0.42	**47.49**	36.05	16.46	**52.51**	**100.00**
Ridge Top	28.07	0.00	25.54	0.00	1.98	**55.60**	41.00	2.62	**43.62**	**100.00**
N-Facing Slope	29.44	0.15	20.77	0.00	0.73	**51.10**	44.67	4.23	**48.90**	**100.00**
Terrace Top	36.57	0.00	15.72	0.00	0.00	**52.29**	41.67	6.04	**47.71**	**100.00**
Limestone Soils	61.68	0.06	2.20	0.00	0.31	**64.24**	26.05	9.70	**35.76**	**100.00**

Table 5.6 Comparison of mean relative cover of individual and combined perennial bunchgrasses, combined non-native annual grasses, combined forb species, and bare soil. 2004 field surveys, Centennial Specific Plan Project Site, Los Angeles County, California.

	Mean Relative Cover[1]						
Landscape Position	ACSP[2]	ELMU[2]	NACE[2]	POSES[2]	Total Bunchgrasses	Total Non-Native Annual Grasses	Bare Ground
Floodplain	0.00	0.10	0.10	2.25	2.45	32.70	20.20
North-facing Lower Concave Slopes	0.00	0.15	1.35	17.62	19.08	23.73	20.00
North-facing Lower Convex Slopes	0.53	2.21	2.37	17.89	23.00	15.74	28.42
North-facing Upper Concave Slopes	0.57	3.00	4.00	21.74	29.30	10.35	30.48
North-facing Upper Convex Slopes	2.36	2.33	5.64	22.97	33.31	6.28	32.64
Ridge tops	1.63	0.96	17.71	12.02	32.32	4.07	40.63
South-facing Upper Convex Slopes	0.03	0.18	16.97	3.73	20.91	12.33	33.64
South-facing Upper Concave Slopes	0.06	0.11	8.11	1.39	9.67	27.56	25.83
South-facing Lower Convex Slopes	0.00	0.81	6.56	0.44	7.81	33.75	20.13
South-facing Lower Concave Slopes	0.03	0.03	4.19	0.71	4.97	31.16	22.32

1. Color-coding:

ACSP and ELMU: Dark Purple = high cover, clustered distribution (>1%)
Med. Purple = moderate cover, clustered distribution (0.3-1%)
Light Purple = low cover, clustered distribution (<0.5%)
NACE and POSES: Dark Blue = high cover, broad distribution (>10%)
Med. Blue = moderate cover, broad distribution (5-10%)
Light Blue = low cover, broad distribution (<5%)
NACE and POSES: Dark Blue = high cover, broad distribution (>10%)
Med. Blue = moderate cover, broad distribution (5-10%)
Light Blue = low cover, broad distribution (<5%)
Total Grasses: Dark Green = high cover, broad distribution (>20%)
Med. Green = moderate cover, broad distribution (10-20%)
Light Green = low cover, broad distribution (<10%)
Bare ground: Dark Tan = high bare ground (>30%)
Med. Tan = moderate bare ground (10-30%)

2. ACSP = *Achnatherum speciosum;* ELMU = *Elymus multisetus*; NACE = *Nasella cernua*; POSES = *Poa secunda* ssp. *secunda*

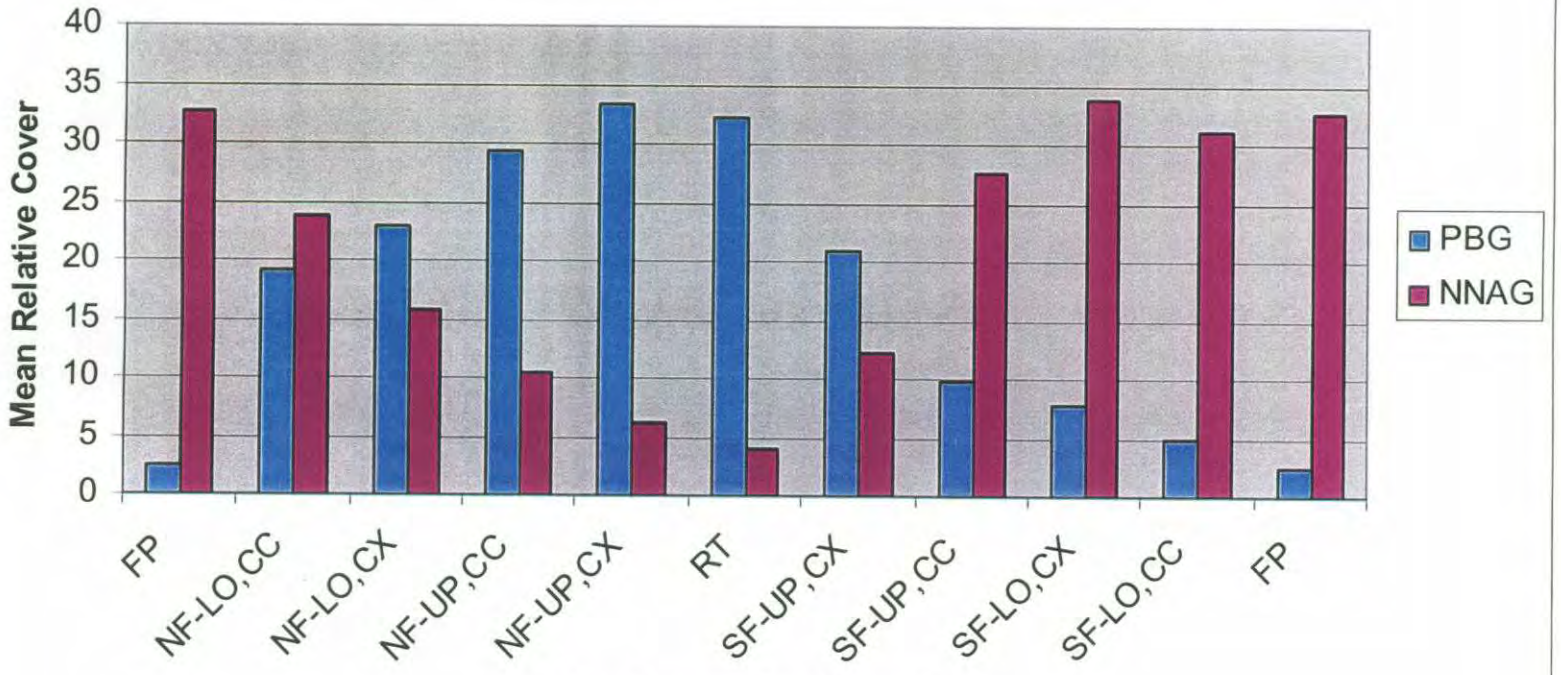
Table 5.7 Frequency of occurrence of individual perennial bunchgrass species within sampled plots at different landscape positions. Centennial Specific Plan Project Site, Los Angeles County, California.

Landscape Position	Total Number of Plots	Frequency of Occurrence by Species							
		Nodding Needlegrass (*Nasella cernua*)		One-sided Bluegrass (*Poa secunda* ssp. *secunda*)		Big Squirreltail (*Elymus multisetus*)		Desert Needlegrass (*Achnatherum speciosum*)	
		Number of Plots	Frequency (% of plots)	Number of Plots	Frequency (% of plots)	Number of Plots	Frequency (% of plots)	Number of Plots	Frequency (% of plots)
Floodplains	20	1	5.00%	7	35.00%	1	5.00%	0	0.00
North-Facing, Lower, Concave Slopes	26	8	30.77%	24	92.31%	3	11.54%	0	0.00
North-Facing, Lower, Convex Slopes	19	8	42.11%	18	94.74%	8	42.11%	2	10.53%
North-Facing, Upper, Concave Slopes	23	16	69.57%	22	95.65%	12	52.17%	2	8.70%
North-Facing, Upper, Convex Slopes	36	29	80.56%	36	100.00%	21	58.33%	6	16.67%
Ridge tops	56	55	98.21%	53	94.64%	10	17.86%	10	17.86%
South-Facing, Upper, Convex Slopes	33	32	96.97%	29	87.88%	1	3.03%	1	3.03%
South-Facing, Upper, Concave Slopes	18	15	83.33%	6	33.33%	1	5.56%	1	5.56%
South-Facing, Lower, Convex Slopes	16	11	68.75%	2	12.50%	0	0.00	0	0.00
South-Facing, Lower, Concave Slopes	31	18	58.06%	5	16.13%	1	3.23%	1	3.23%
All Landscape Positions	278	193	69.42%	202	72.66%	58	20.86%	23	8.27%

Table 5.8 Summary of soil characteristics (percent organic matter, total cation exchange capacity (CEC), and pH) at different landscape positions, conducted by Vollmar Consulting, Spring, 2004 Centennial Specific Plan Project Site, Los Angeles County, California.

Landscape Position	Sample Size (N)	Soil Chemical and Physical Properties		
		Mean % OM	Mean Total CEC (meq/100g)	Mean Soil pH
Floodplains	5	2.90	9.72	7.42
North-facing Lower Concave Slopes	6	2.58	9.78	7.57
North-facing Lower Convex Slopes	3	2.77	8.97	7.57
North-facing Upper Concave Slopes	4	1.90	5.55	7.48
North-facing Upper Convex Slopes	5	1.98	7.44	7.48
Ridge tops	5	2.12	10.44	7.62
South-facing Upper Convex Slopes	5	2.14	7.62	7.48
South-facing Upper Concave Slopes	5	2.54	8.16	7.46
South-facing Lower Convex Slopes	3	2.30	8.87	7.50
South-facing Lower Concave Slopes	5	2.22	9.64	7.60

Graph 5.1 Comparison of Mean Relative Cover Values of Perennial Bunchgrasses (PBG) and Non-native Annual Grasses (NNAG) across Different Landscape Positions (2004, Centennial Specific Plan Project Site)



Landscape Position Codes:

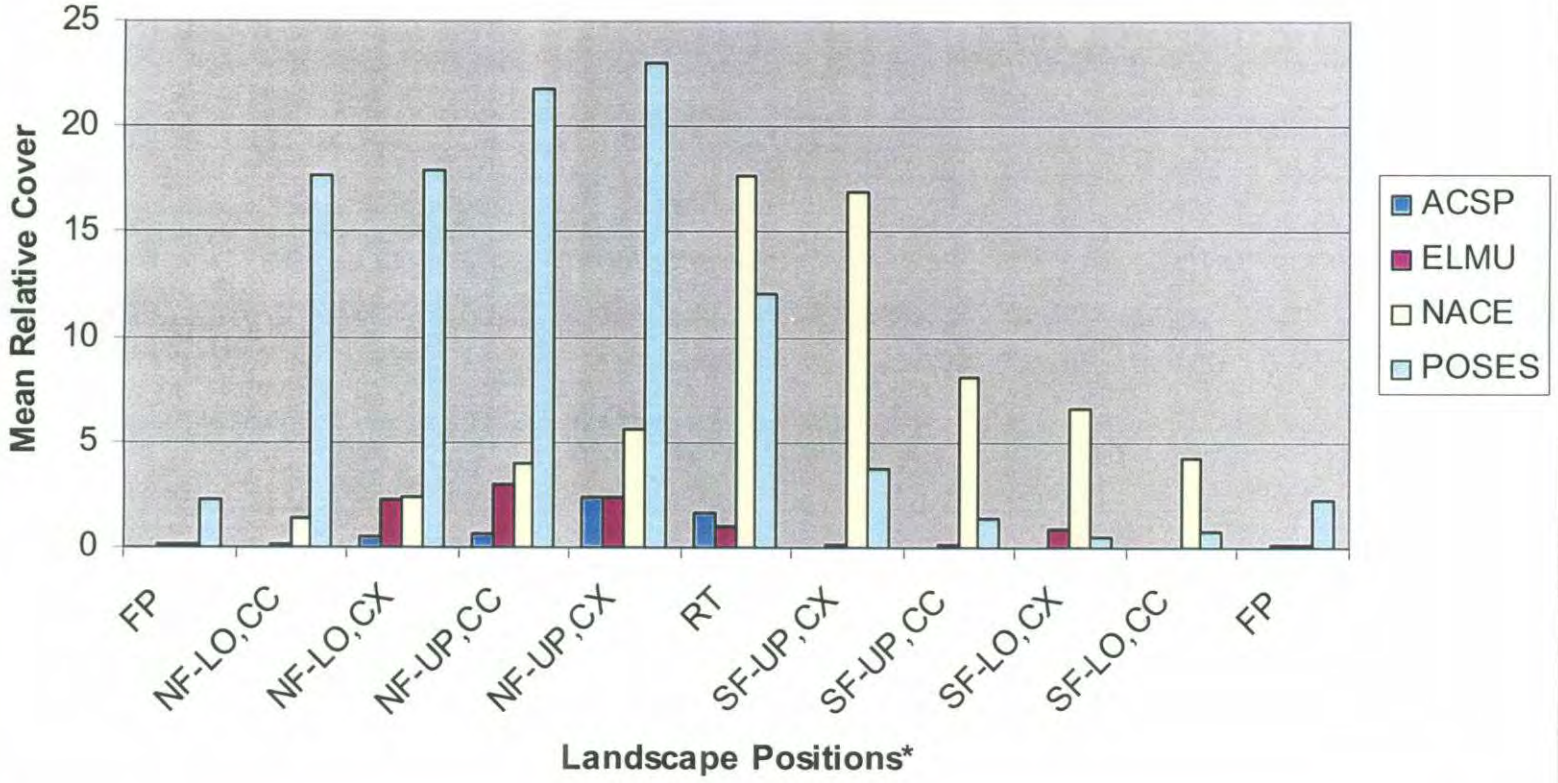
FP = Floodplain

NF-LO,CC = North-facing Lower Concave Slope
NF-LOCX = North-facing Lower Convex Slope
NF-UP,CC = North-facing Upper Concave Slope
NF-UP,CX = North-facing Upper Convex Slope

RT = Ridge top

SF-UP,CX= South-facing Upper Convex Slope
SF-UP,CC = South-facing Upper Concave Slope
SF-LO,CX= South-facing Lower Convex Slope
SF-LO,CC = South-facing Lower Concave Slope

Graph 5.2 Comparison of Mean Relative Cover Values of Four Perennial Bunchgrass Species across Different Landscape Positions (2004, Centennial Specific Plan Project Site)



Landscape Position Codes:

FP = Floodplain

NF-LO,CC = North-facing Lower Concave Slope
NF-LOCX = North-facing Lower Convex Slope
NF-UP,CC = North-facing Upper Concave Slope
NF-UP,CX = North-facing Upper Convex Slope

RT = Ridge top

SF-UP,CX= South-facing Upper Convex Slope
SF-UP,CC = South-facing Upper Concave Slope
SF-LO,CX= South-facing Lower Convex Slope
SF-LO,CC = South-facing Lower Concave Slope

5.5 DISCUSSION

5.5.1 Study Area Distribution of the Perennial Bunchgrass Community

The perennial bunchgrass community is primarily restricted to two geologic formations within the study area: the 12-million year old Continental Deposits and the 100,000 to one million year old Terrace Deposits. Together, these formations form a cohesive, recognizable geomorphic feature within the broad central and southeastern regions of the study area (Figure 5.2). This feature consists of west to east trending ridges, deeply cut intervening drainages, and associated remnant alluvial fans and terraces. The flat terrace tops are remnants of a former alluvial surface that covered the local region. During the past 100,000 years, this surface has been steadily eroding, revealing the underlying Continental Deposits and resulting in the current topography.

There are scattered bunchgrass stands in other regions of the study area, especially one-sided bluegrass on Santa Margarita Formation in the southwestern region of the study area. However, these stands are small in total area and isolated within surrounding annual grasslands. Certain formations including Recent Alluvium (existing floodplains and recent alluvial plains), all the granitic formations, and Purple Andesite have little to no occurrence of perennial bunchgrasses.

5.5.2 Local Distribution of the Perennial Bunchgrass Community

The perennial bunchgrass community has a distinct local distribution pattern within the ridges and terraces. The highest quality stands (those with a dominant cover of bunchgrasses and native wildflowers and a low cover of non-native annual grasses) are concentrated in areas with thinner, eroded soils including ridge tops, terrace tops, upper slopes, and lower convex slopes (especially north-facing). Other landscape positions with deeper, accumulated soils, including floodplains, lower slopes, and upper concave slopes tend to be dominated by non-native annual grasses with a low to very low bunchgrass cover. The abundance of bunchgrasses follows a roughly normal curve across the landscape gradient (e.g. from one floodplain, up and over a ridge top and back down to another floodplain). The abundance of annual grasses is inversely related to this gradient and to the abundance of bunchgrasses. This inverse relationship, clearly shown in Graph 5.1, appears to be due to a combination of competitive exclusion by annual grasses in areas with deeper soils and the inability of the annual grasses to survive and compete on thinner more exposed soils.

Within the community, each of the four individual bunchgrass species also has a distinct local distribution pattern related to aspect and slope position. Like the perennial bunchgrasses as a whole, the distribution and abundance of each species follows a roughly normal curve. However, each species has a different center of abundance and span across the landscape gradient as shown in Graph 5.2. Nodding needlegrass and one-sided bluegrass, the two dominant bunchgrass species, are centered on different aspects, with the former preferring more exposed, south-facing slopes and ridge tops, and the latter preferring north-facing slopes. These species overlap considerably along the ridge tops. The lower slope distributions of these species appear to be limited by competition with non-native annual grasses. Big squirreltail and desert needlegrass, both sub-dominant species, have considerable overlap in their distributions; desert

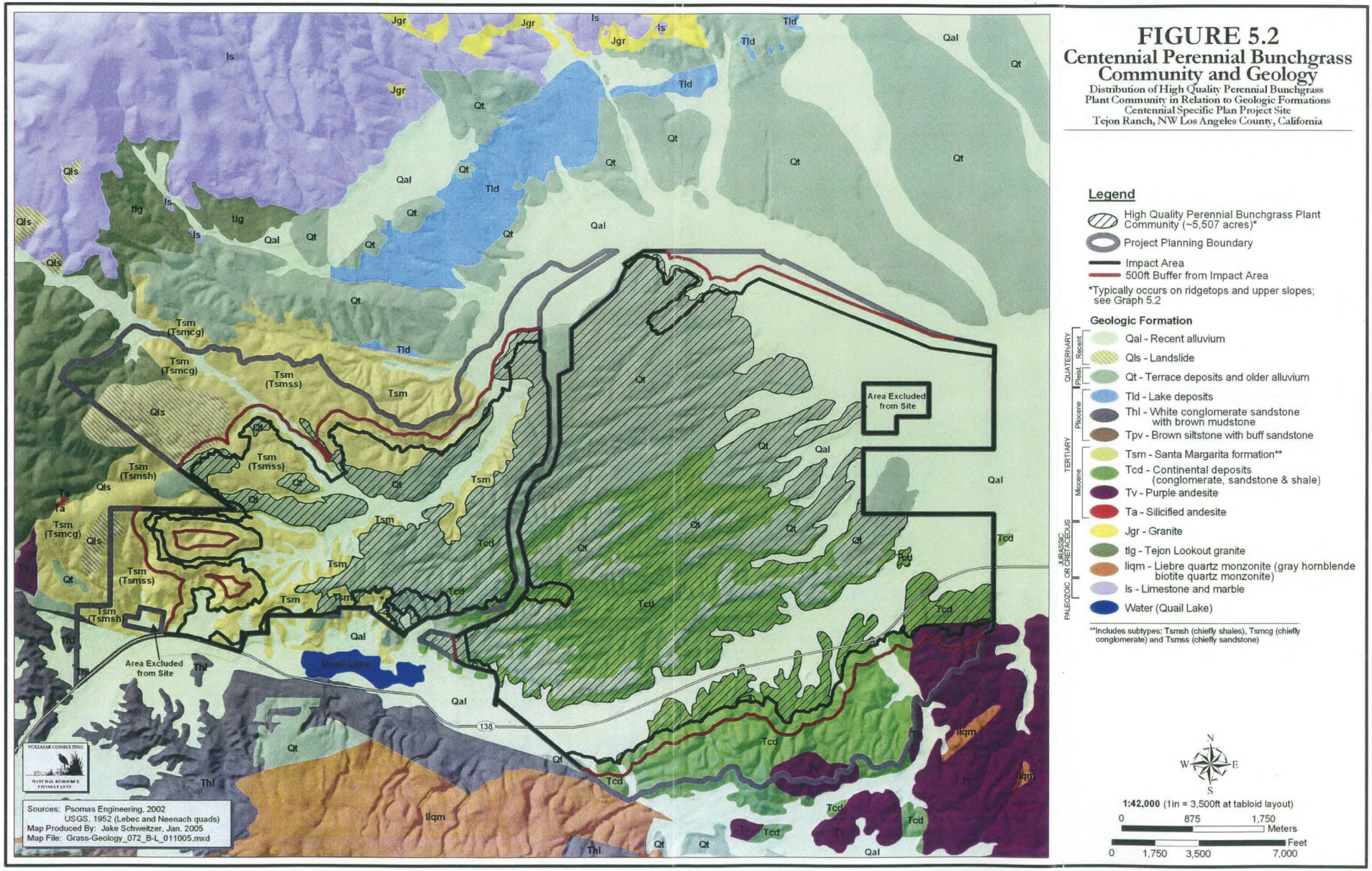


FIGURE 5.2
Centennial Perennial Bunchgrass Community and Geology

Distribution of High Quality Perennial Bunchgrass Plant Community in Relation to Geologic Formations
Centennial Specific Plan Project Site
Tejon Ranch, NW Los Angeles County, California

Legend

- High Quality Perennial Bunchgrass Plant Community (~5,507 acres)*
- Project Planning Boundary
- Impact Area
- 500ft Buffer from Impact Area

*Typically occurs on ridgetops and upper slopes; see Graph 5.2

Geologic Formation

QUATERNARY
- Recent
  - Qal - Recent alluvium
  - Qls - Landslide
- Pleist
  - Qt - Terrace deposits and older alluvium

TERTIARY
- Pliocene
  - Tld - Lake deposits
  - Thl - White conglomerate sandstone with brown mudstone
  - Tpv - Brown siltstone with buff sandstone
- Miocene
  - Tsm - Santa Margarita formation**
  - Tcd - Continental deposits (conglomerate, sandstone & shale)
  - Tv - Purple andesite
  - Ta - Silicified andesite

JURASSIC OR CRETACEOUS
- Jgr - Granite
- tlg - Tejon Lookout granite
- liqm - Liebre quartz monzonite (gray hornblende biotite quartz monzonite)

PALEOZOIC
- Is - Limestone and marble

- Water (Quail Lake)

**Includes subtypes: Tsmsh (chiefly shales), Tsmcg (chiefly conglomerate) and Tsmss (chiefly sandstone)

N
W E
S

1:42,000 (1in = 3,500ft at tabloid layout)

0 875 1,750 Meters

0 1,750 3,500 7,000 Feet

needlegrass is most abundant on ridge tops and north-facing convex slopes, and big squirreltail is most abundant on north-facing upper slopes and lower convex slopes. Both species have distinctly clustered distributions within their areas of abundance that appear to minimize competitive exclusion.

Areas with high cover of perennial bunchgrasses also had a high percentage of bare ground, as shown especially in the 2003 survey data. The current paradigm of the historic bunchgrass community theorizes that the open areas between bunchgrass clumps were occupied by a diverse array of native annual wildflowers and grasses (Heady, 1995). During favorable rain years, these wildflowers are thought to have provided a showy display. Indeed, this very pattern was observed during the 2003 field season. Heavy winter rains and prolonged spring rains produced a very showy bloom that, according to locals, only occurs once every five to ten years. The profusion of wildflowers included more than 70 native species within the perennial bunchgrass community, including many unusual or uncommon species. Sylvan microseris, a special-status species, was among these. Like the bunchgrasses, many of these wildflowers had landscape-specific distribution patterns with certain species occurring exclusively or primarily on south slopes, and others occurring exclusively or primarily on north slopes. Also like the bunchgrasses, the ridge tops and upper slopes tended to be mixing zones for species from the different slopes.

5.5.3 Environmental Factors Influencing the Regional Occurrence and Local Distribution of the Perennial Bunchgrass Community

The extreme statewide rarity of such a large, continuous perennial bunchgrass stand begs the questions as to why this stand occurs in this particular region. Information gathered during this study indicates it is due to a unique combination of environmental factors related primarily to regional geography, local climate, and geology.

As described earlier, the study area is situated just east of the junction of the Tehachapi Ranges and Western Transverse Ranges. This junction, located where the San Andreas Fault cuts through the two mountain ranges, creates a topographic 'notch' that strongly influences local climatic. High winds are common in this area throughout the year. These winds undoubtedly accelerate drying of the exposed ridge top and upper slope soils, creating harsh conditions for annual grasses. In summer 2003, John Vollmar observed that some ridge areas were heavily wind blown and nearly devoid of vegetation except for perennial bunchgrass clumps. With regards to precipitation, there is a rainfall gradient across the study area as evidenced by the local transition in plant communities from oak woodlands and chaparral west of the study area, to perennial and annual grasslands in the center of the study area, to desert scrub less than a mile east of the study area. This gradual transition from mountain to desert plant communities with an intervening grassland community is partly due to the topographic notch, which provides for a more gradual rainfall gradient than regions to the north and south that are blocked by tall mountains. These areas have a more dramatic rainshadow effect and, typically, an abrupt transition from mountain to desert plant communities without intervening interior California grasslands.

The specific transitional rainfall levels within the study area appear to directly influence the presence of the perennial bunchgrass community. The non-native annual grasses require a certain minimum rainfall level and/or seasonal soil moisture to thrive. These rainfall levels are obviously achieved west of the study area where annual grasslands predominate on the open hills between the study area and the I-5 corridor. Within the study area, the annual grasses occur as a dominant community in areas with deeper, accumulated soils such as floodplains and lower concave slopes. These soils have a comparatively higher moisture holding capacity and accumulate and hold enough moisture to sustain annual grasses. On the ridge tops and upper slope, the soils are thinner and coarser with a diminished water holding capacity. In these areas, the annual grasses apparently cannot survive as a dominant community. There is, however, enough seasonal precipitation and soil moisture to sustain perennial bunchgrasses and associated native wildflowers. East of the study area, the precipitation levels gradually drop as the habitat transitions to a desert scrub community with desert needlegrass as the only associated bunchgrass. Apparently, the lower annual rainfall levels and/or seasonal rainfall patterns are insufficient to sustain the other three bunchgrass species. The non-native annual grasses are also generally absent except for cheat grass.

The local geology and associated soils appear to be critical factors influencing the presence of the perennial bunchgrass community though it is unclear why. The bunchgrass community is primarily restricted to two geologic formations, Continental Deposits and Terrace Deposits. While these formations differ in age by more than 10 million years, they both have similar geologic and soil characteristics. Both are formed from mixed alluvium with the same broad range of parent materials including granite, sandstone, shale, limestone and perhaps andesite. Both have characteristically thin, coarse, weathered soils. Both are slightly alkaline due to the presence of calcium from limestone. The elevated pH is probably unlike the nearby granitic soils, which are typically slightly acidic. While identical rainfall levels fall on other adjacent formations, they do not, for whatever reason, support dominant stands of perennial bunchgrasses. This may be related to differences in moisture holding capacity, nutrient balance, soil texture, soil pH or other soil characteristic or combination of characteristics.

Historic and ongoing land use may also be a contributing factor. The region of the study area has been continuously owned and grazed by the Tejon Ranch for more than 150 years. Many of the remnant perennial bunchgrass stands in California are on large, intact ranches and military installations that have had long-term consistent ownership and management. As such, the presence and quality of this stand may be attributed in part to the long-term management approaches and stewardship by Tejon Ranch. The current grazing practices do not appear to be having a negative impact on the perennial bunchgrass community. There was ample evidence of cattle foraging on the bunchgrasses, in some cases down to the ground. However, there was also ample evidence of regeneration and recruitment within the community based the presence of differently sized individual grass clumps.

5.5.4 Comparison with Other Known Perennial Bunchgrass Stands

Historically, the perennial bunchgrass plant community is thought to have occurred throughout interior lowland California. Nearly all of the original perennial bunchgrass community has been altered or replaced by introduced annual grasses and only a couple of dozen remnant patches of

the historic California native perennial grasslands still exist today. The remaining intact perennial bunchgrass stands are scattered across the state in preserves and on privately owned ranchlands and military installations. Most are isolated stands, generally less than 300 acres in total area, and often with a high cover of introduced annual grasses. The largest stands of better quality bunchgrass community are located in Kern and San Luis Obispo counties. Within the local region, perennial bunchgrass stands occur on the Terrace Deposit formations northeast of the study area (Figure 5.2). These flat terraces and adjacent lower hill slopes are dominated by fairly extensive stands of nodding needlegrass and, occasionally, other bunchgrass species. Together, these stands may incorporate a total of 3,000 to 4,000 acres. These stands are notable for their lack of introduced annual grasses but lack the geologic and landscape complexity of the study area stands. As a result, these stands appear to have a lower diversity of wildflowers and a lower richness of bunchgrass species as compared with those in the study area.

Isolated stands of perennial bunchgrasses occur west of the study area region, in the Hungry Valley State Vehicular Recreation Area located west of Gorman, in a few scattered areas in the hills southeast of the study area, scattered along Interstate 5 near Gorman, and in the foothills and terraces of the San Emigdio Mountains south of Maricopa in the southwest corner of Kern County. In all of these areas, stands of nodding needlegrass and/or one-sided bluegrass occur but typically have a moderate to heavy associated cover of introduced annual grasses. These areas also lack the diversity of the perennial bunchgrass and wildflower species that highlight the bunchgrass community in the study area. Most of these areas have three bunchgrass species – nodding needlegrass, one-sided bluegrass, and big squirreltail – but lack desert needlegrass due to higher rainfall levels.

The best comparative example of a relatively large stand of undisturbed perennial bunchgrass community occurs on Camp Roberts at the boundary of San Luis Obispo and Monterey counties in the southern Salinas Valley. Isolated and scattered clumps of nodding needlegrass occur over an estimated 1,500 to 2,000 acres. Some of the clumps also support one-sided bluegrass. Overall, the bunchgrass stands in Camp Roberts lacks the diversity of bunchgrass and wildflower species and the large contiguous stands of uninterrupted perennial bunchgrasses found in the study area. Small areas of perennial bunchgrass stands also occur in the hills of the Carrizo Plain National Monument in southeastern San Luis Obispo County. While some stands of undisturbed perennial grasses (nodding needlegrass and one-sided bluegrass) do occur in the Carrizo Plain, most are dominated or co-dominated by introduced annual grasses. Again, these bunchgrass stands lack the diversity of perennial bunchgrass species, the richness of wildflower species, and the large expanses of uninterrupted bunchgrass community that characterize the unique, high-quality perennial bunchgrass community in the study area. Several smaller relic perennial bunchgrass sites are scattered across the northern region of the Central Valley. These sites are typically small isolated areas, generally less than 300 acres in total area, in preserves and parks and range from fair to excellent quality.

5.6 CONCLUSION

Based on data collected within the study area, a review of available information (Barry, 1972) and discussions with native grassland experts (Dremann, 2004; Barbour, 2004), it is concluded that the perennial bunchgrass community in the study area is unique in California as a large, high

quality interior valley (*Nasella-Poa* dominated) native bunchgrass community. This stand incorporates more than 5,500 semi-continuous acres within the study area, larger by a couple thousand acres than any other known stand. Its high quality is due to the high cover and richness of perennial bunchgrass species, the association of a large, diverse assemblage of showy native wildflower species, the conspicuously low cover of non-native annual grasses, and the general lack of invasive weeds. The topographic variability, with alternating steep north-facing and south-facing slopes, ridge tops, terrace tops, and floodplains, increases the habitat quality by providing diverse and intricate species distribution patterns and associations which can serve as a model for understanding the species dynamics within a currently rare but historically important and widespread plant community. The stand also provides important information on the competitive dynamics between native bunchgrass community and non-native annual grasslands.

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APPENDIX 5

PERENNIAL BUNCHGRASS PLANT COMMUNITY STUDY RESULTS, STATISTICAL TABLES, MANN-WHITNEY SIGNIFICANCE TESTS

Table 5.9 Descriptive statistics for species richness within sampled plots by plant category and landscape position (2003 field data). Perennial Bunchgrass Plant Community Study, Centennial Specific Plan Project Site, Los Angeles, California.

DISTURBED ALLUVIAL PLAINS

Category	N	N*	Mean	SE Mean	StDev	Min	Q1	Med	Q3	Max
Native Forbs	9	0	5.44	1.09	3.28	1	3.00	4.00	8.50	11
Native Annual Grasses	9	0	0.44	0.18	0.53	0	0.00	0.00	1.00	1
Native Perennial Bunch Grasses	9	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0
Native Perennial Sod Grasses	9	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0
Native Shrubs	9	0	0.22	0.15	0.44	0	0.00	0.00	0.50	1
TOTAL NATIVE PLANTS	**9**	**0**	**6.11**	**1.27**	**3.82**	**1**	**3**	**5**	**10**	**12**
Non-Native Forbs	9	0	2.44	0.18	0.53	2	2	2	3	3
Non-Native Annual Grasses	9	0	2.22	0.40	1.20	0	1.50	2.00	3.00	4
TOTAL NON-NATIVE PLANTS	**9**	**0**	**4.67**	**0.44**	**1.32**	**2**	**4**	**5**	**6**	**6**
TOTAL ALL PLANTS	**9**	**0**	**10.78**	**1.42**	**4.27**	**3**	**8**	**10**	**15**	**16**

FLOODPLAINS

Category	N	N*	Mean	SE Mean	StDev	Min	Q1	Med	Q3	Max
Native Forbs	9	0	7.00	0.53	1.58	5	6.00	7.00	8.00	10
Native Annual Grasses	9	0	0.89	0.26	0.78	0	0.00	1.00	1.50	2
Native Perennial Bunch Grasses	9	0	0.33	0.17	0.50	0	0.00	0.00	1.00	1
Native Perennial Sod Grasses	9	0	0.11	0.11	0.33	0	0.00	0.00	0.00	1
Native Shrubs	9	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0
TOTAL NATIVE PLANTS	**9**	**0**	**8.33**	**0.60**	**1.80**	**5**	**7**	**9**	**9.5**	**11**
Non-Native Forbs	9	0	1.11	0.11	0.33	1	1	1	1	2
Non-Native Annual Grasses	9	0	3.00	0.37	1.12	2	2.00	3.00	4.00	5
TOTAL NON-NATIVE PLANTS	**9**	**0**	**4.11**	**0.35**	**1.05**	**3**	**3**	**4**	**5**	**6**
TOTAL ALL PLANTS	**9**	**0**	**12.44**	**0.73**	**2.19**	**9**	**10.5**	**12**	**14.5**	**15**

SOUTH-FACING SLOPES

Category	N	N*	Mean	SE Mean	StDev	Min	Q1	Med	Q3	Max
Native Forbs	9	0	10.56	0.93	2.80	6	8.00	11.00	13.00	14
Native Annual Grasses	9	0	0.22	0.15	0.44	0	0.00	0.00	0.50	1
Native Perennial Bunch Grasses	9	0	1.33	0.17	0.50	1	1.00	1.00	2.00	2
Native Perennial Sod Grasses	9	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0
Native Shrubs	9	0	0.22	0.15	0.44	0	0.00	0.00	0.50	1
TOTAL NATIVE PLANTS	**9**	**0**	**12.33**	**1.00**	**3.00**	**7**	**10**	**13**	**15**	**16**
Non-Native Forbs	9	0	1.22	0.15	0.44	1	1	1	1.5	2
Non-Native Annual Grasses	9	0	2.11	0.35	1.05	1	1.00	2.00	3.00	4
TOTAL NON-NATIVE PLANTS	**9**	**0**	**3.33**	**0.47**	**1.41**	**2**	**2**	**3**	**4.5**	**6**
TOTAL ALL PLANTS	**9**	**0**	**15.67**	**0.99**	**2.96**	**12**	**12.5**	**16**	**18.5**	**19**

RIDGE TOPS

Category	N	N*	Mean	SE Mean	StDev	Min	Q1	Med	Q3	Max
Native Forbs	8	0	10.50	1.21	3.42	5	7.00	11.50	12.75	15
Native Annual Grasses	8	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0
Native Perennial Bunch Grasses	8	0	1.88	0.23	0.64	1	1.25	2.00	2.00	3
Native Perennial Sod Grasses	8	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0
Native Shrubs	8	0	0.50	0.27	0.76	0	0.00	0.00	1.00	2
TOTAL NATIVE PLANTS	**8**	**0**	**12.88**	**1.04**	**2.95**	**8**	**10**	**14**	**14**	**17**
Non-Native Forbs	8	0	1.38	0.26	0.74	1	1	1	1.75	3
Non-Native Annual Grasses	8	0	1.38	0.26	0.74	1	1	1	1.75	3
TOTAL NON-NATIVE PLANTS	**8**	**0**	**2.75**	**0.31**	**0.89**	**2**	**2**	**2.5**	**3.75**	**4**
TOTAL ALL PLANTS	**8**	**0**	**15.63**	**1.18**	**3.34**	**10**	**12.25**	**16.5**	**18**	**19**

NORTH-FACING SLOPES

Category	N	N*	Mean	SE Mean	StDev	Min	Q1	Med	Q3	Max
Native Forbs	9	0	12.11	0.99	2.98	8	9.50	12.00	14.50	17
Native Annual Grasses	9	0	0.11	0.11	0.33	0	0.00	0.00	0.00	1
Native Perennial Bunch Grasses	9	0	1.78	0.15	0.44	1	1.50	2.00	2.00	2
Native Perennial Sod Grasses	9	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0
Native Shrubs	9	0	0.22	0.15	0.44	0	0.00	0.00	0.50	1
TOTAL NATIVE PLANTS	**9**	**0**	**14.22**	**1.16**	**3.49**	**9**	**11**	**14**	**17.5**	**19**
Non-Native Forbs	9	0	1.22	0.15	0.44	1	1	1	1.5	2
Non-Native Annual Grasses	9	0	1.56	0.18	0.53	1	1.00	2.00	2.00	2
TOTAL NON-NATIVE PLANTS	**9**	**0**	**2.78**	**0.22**	**0.67**	**2**	**2**	**3**	**3**	**4**
TOTAL ALL PLANTS	**9**	**0**	**17.00**	**1.28**	**3.84**	**11**	**14**	**17**	**20**	**23**

TERRACE TOPS

Category	N	N*	Mean	SE Mean	StDev	Min	Q1	Med	Q3	Max
Native Forbs	5	0	6.00	0.78	1.73	5	5.00	5.00	7.50	9
Native Annual Grasses	5	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0
Native Perennial Bunch Grasses	5	0	1.80	0.20	0.45	1	1.50	2.00	2.00	2
Native Perennial Sod Grasses	5	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0
Native Shrubs	5	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0
TOTAL NATIVE PLANTS	**5**	**0**	**7.80**	**0.80**	**1.79**	**7**	**7**	**7**	**9**	**11**
Non-Native Forbs	5	0	1.20	0.20	0.45	1	1	1	1.5	2
Non-Native Annual Grasses	5	0	1.20	0.20	0.45	1	1	1	1.5	2
TOTAL NON-NATIVE PLANTS	**5**	**0**	**2.40**	**0.25**	**0.55**	**2**	**2**	**2**	**3**	**3**
TOTAL ALL PLANTS	**5**	**0**	**10.20**	**0.74**	**1.64**	**9**	**9**	**10**	**11.5**	**13**

LIMESTONE SOILS

Category	N	N*	Mean	SE Mean	StDev	Min	Q1	Med	Q3	Max
Native Forbs	6	0	10.67	0.62	1.51	9	9.00	11.00	11.50	13
Native Annual Grasses	6	0	0.33	0.21	0.52	0	0.00	0.00	1.00	1
Native Perennial Bunch Grasses	6	0	1.00	0.26	0.63	0	0.75	1.00	1.25	2
Native Perennial Sod Grasses	6	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0
Native Shrubs	6	0	0.33	0.21	0.52	0	0.00	0.00	1.00	1
TOTAL NATIVE PLANTS	**6**	**0**	**12.33**	**0.62**	**1.51**	**10**	**10.75**	**13**	**13.25**	**14**
Non-Native Forbs	6	0	2.00	0.26	0.63	1	1.75	2	2.25	3
Non-Native Annual Grasses	6	0	3.67	0.42	1.03	2	2.75	4.00	4.25	5
TOTAL NON-NATIVE PLANTS	**6**	**0**	**5.67**	**0.49**	**1.21**	**4**	**4.75**	**5.5**	**7**	**7**
TOTAL ALL PLANTS	**6**	**0**	**18.00**	**1.00**	**2.45**	**15**	**15**	**19**	**20**	**20**

Table 5.10 Descriptive statistics for relative plant cover within sampled plots by plant category and landscape position (2003 field data). Perennial Bunchgrass Plant Community Study, Centennial Specific Plan Project Site, Los Angeles County, California.

DISTURBED ALLUVIAL PLAINS

Categnry	N	N*	Mean	SE Mean	St Dev	Min	Q1	Med	Q3	Max
Native Forbs	27	0	11.51	2.74	14.26	0.00	2.02	5.94	13.51	56.00
Native Annual Grasses	27	0	0.31	0.09	0.49	0.00	0.00	0.00	0.98	1.33
Native Perennial Bunch Grasses	27	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Native Perennial Sod Grasses	27	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Native Shrubs	27	0	1.92	0.96	4.98	0.00	0.00	0.00	0.00	19.05
TOTAL NATIVE PLANTS	**27**	**0**	**13.74**	**3.08**	**16.01**	**0.00**	**2.13**	**8.00**	**20.95**	**57.33**
Non-Native Forbs	27	0	83.38	3.07	15.93	41.33	77.14	89.55	94.06	100.00
Non-Native Annual Grasses	27	0	2.88	0.58	2.99	0.00	1.00	2.02	5.26	12.50
TOTAL NON-NATIVE PLANTS	**27**	**0**	**86.26**	**3.08**	**16.01**	**42.67**	**79.05**	**92.00**	**97.87**	**100.00**

FLOODPLAINS

Category	N	N*	Mean	SE Mean	St Dev	Min	Q1	Med	Q3	Max
Native Forbs	27	0	20.72	2.58	13.42	5.56	10.81	14.81	29.09	54.08
Native Annual Grasses	27	0	0.83	0.30	1.54	0.00	0.00	0.00	0.83	5.45
Native Perennial Bunch Grasses	27	0	0.64	0.33	1.70	0.00	0.00	0.00	0.00	7.75
Native Perennial Sod Grasses	27	0	0.74	0.48	2.50	0.00	0.00	0.00	0.00	12.00
Native Shrubs	27	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL NATIVE PLANTS	**27**	**0**	**22.63**	**2.62**	**13.62**	**9.35**	**12.00**	**16.67**	**34.55**	**54.08**
Non-Native Forbs	27	0	67.58	3.32	17.23	13.70	59.41	73.17	83.33	87.39
Non-Native Annual Grasses	27	0	9.49	2.42	12.56	0.00	1.82	5.43	8.41	47.01
TOTAL NON-NATIVE PLANTS	**27**	**0**	**77.07**	**2.62**	**13.62**	**45.92**	**65.45**	**83.33**	**88.00**	**90.65**

SOUTH-FACING SLOPES

Category	N	N*	Mean	SE Mean	St Dev	Min	Q1	Med	Q3	Max
Native Forbs	27	0	42.32	3.40	17.65	13.04	28.57	44.55	56.84	76.52
Native Annual Grasses	27	0	0.08	0.08	0.41	0.00	0.00	0.00	0.00	2.13
Native Perennial Bunch Grasses	27	0	4.48	1.38	7.15	0.00	0.00	0.00	7.25	26.67
Native Perennial Sod Grasses	27	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Native Shrubs	27	0	0.53	0.53	2.75	0.00	0.00	0.00	0.00	14.29
TOTAL NATIVE PLANTS	**27**	**0**	**47.30**	**3.77**	**19.60**	**13.04**	**35.00**	**45.45**	**61.29**	**90.41**
Non-Native Forbs	27	0	35.34	4.50	23.38	6.17	10.53	34.48	50.51	81.63
Non-Native Annual Grasses	27	0	17.35	4.01	20.84	0.00	1.90	5.94	30.43	79.71
TOTAL NON-NATIVE PLANTS	**27**	**0**	**52.70**	**3.77**	**19.60**	**9.59**	**38.71**	**54.55**	**65.00**	**86.96**

RIDGE TOPS

Category	N	N*	Mean	SE Mean	St Dev	Min	Q1	Med	Q3	Max
Native Forbs	24	0	25.69	4.08	19.97	2.04	9.10	21.70	41.42	80.19
Native Annual Grasses	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Native Perennial Bunch Grasses	24	0	32.54	5.06	24.80	0.00	8.00	37.35	54.97	75.00
Native Perennial Sod Grasses	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Native Shrubs	24	0	1.16	1.16	5.67	0.00	0.00	0.00	0.00	27.78
TOTAL NATIVE PLANTS	**24**	**0**	**59.39**	**4.89**	**23.97**	**19.05**	**39.82**	**60.67**	**79.20**	**97.78**
Non-Native Forbs	24	0	37.01	4.86	23.82	0.00	17.70	34.90	59.63	79.37
Non-Native Annual Grasses	24	0	2.56	0.39	1.02	0.00	1.10	2.18	4.59	5.68
TOTAL NON-NATIVE PLANTS	**24**	**0**	**39.57**	**4.87**	**23.86**	**2.22**	**20.80**	**36.04**	**60.18**	**80.95**

NORTH-FACING SLOPES

Category	N	N*	Mean	SE Mean	St Dev	Min	Q1	Med	Q3	Max
Native Forbs	27	0	29.94	1.96	10.18	7.27	21.74	29.58	38.57	45.00
Native Annual Grasses	27	0	0.16	0.10	0.51	0.00	0.00	0.00	0.00	2.38
Native Perennial Bunch Grasses	27	0	22.37	2.81	14.59	0.00	10.53	23.53	28.57	59.32
Native Perennial Sod Grasses	27	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Native Shrubs	27	0	0.96	0.71	3.68	0.00	0.00	0.00	0.00	17.54
TOTAL NATIVE PLANTS	**27**	**0**	**53.42**	**3.20**	**16.61**	**20.91**	**38.83**	**59.26**	**70.18**	**78.33**
Non-Native Forbs	27	0	42.62	2.81	14.61	21.67	28.57	36.59	70.18	78.33
Non-Native Annual Grasses	27	0	3.96	0.67	3.47	0.00	1.32	2.91	5.88	11.76
TOTAL NON-NATIVE PLANTS	**27**	**0**	**46.58**	**3.20**	**16.61**	**21.67**	**29.82**	**40.74**	**61.17**	**79.09**

TERRACE TOPS

Category	N	N*	Mean	SE Mean	St Dev	Min	Q1	Med	Q3	Max
Native Forbs	15	0	35.29	8.32	32.21	4.17	8.40	22.22	67.48	91.74
Native Annual Grasses	15	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Native Perennial Bunch Grasses	15	0	16.09	3.41	13.19	1.71	5.00	16.48	20.83	53.76
Native Perennial Sod Grasses	15	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Native Shrubs	15	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
TOTAL NATIVE PLANTS	**15**	**0**	**51.38**	**6.86**	**26.56**	**14.08**	**25.00**	**50.00**	**71.54**	**96.33**
Non-Native Forbs	15	0	42.93	6.37	24.67	0.00	25.64	44.44	57.69	84.51
Non-Native Annual Grasses	15	0	5.69	1.84	7.13	0.00	1.50	2.08	5.56	22.90
TOTAL NON-NATIVE PLANTS	**15**	**0**	**48.62**	**6.86**	**26.56**	**3.67**	**28.46**	**50.00**	**75.00**	**85.92**

LIMESTONE SOILS

Category	N	N*	Mean	SE Mean	St Dev	Min	Q1	Med	Q3	Max
Native Forbs	18	0	64.18	5.34	22.67	20.17	47.12	69.83	81.43	94.64
Native Annual Grasses	18	0	0.07	0.07	0.28	0.00	0.00	0.00	0.00	1.18
Native Perennial Bunch Grasses	18	0	2.24	0.75	3.18	0.00	0.00	0.46	4.17	11.11
Native Perennial Sod Grasses	18	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Native Shrubs	18	0	0.35	0.23	0.97	0.00	0.00	0.00	0.00	3.77
TOTAL NATIVE PLANTS	**18**	**0**	**66.84**	**5.58**	**23.69**	**20.17**	**47.85**	**74.84**	**83.82**	**100.00**
Non-Native Forbs	18	0	23.19	4.53	19.23	0.00	7.88	14.68	43.94	58.82
Non-Native Annual Grasses	18	0	9.97	1.92	8.15	0.00	3.93	7.33	17.39	27.36
TOTAL NON-NATIVE PLANTS	**18**	**0**	**33.16**	**5.58**	**23.69**	**0.00**	**16.18**	**25.16**	**52.15**	**79.83**

Table 5.11 Descriptive statistics for bare soil cover within sampled plots by landscape position (2003 field data). Perennial Bunchgrass Plant Community Study, Centennial Specific Plan Project Site, Los Angeles County, California.

Category	N	N*	Mean	SE Mean	StDev	Min	Q1	Med	Q3	Max
Disturbed Alluvial Plains	27	0	8.67	1.11	5.67	1.00	5.00	10.00	15.00	20.00
Floodplains	27	0	3.15	0.54	2.82	0.00	1.00	2.00	5.00	10.00
South-facing Slopes	27	0	28.44	4.07	21.15	1.00	10.00	25.00	50.00	70.00
Ridge Tops	24	0	50.42	3.62	17.75	10.00	36.25	50.00	60.00	80.00
North-facing Slopes	27	0	26.67	2.85	14.81	5.00	15.00	25.00	40.00	50.00
Terrace Tops	15	0	10.13	3.19	12.34	1.00	1.00	3.00	15.00	40.00
Limestone Soils	18	0	12.00	3.12	13.22	1.00	5.00	5.00	15.00	50.00

Table 5.12 Mann-Whitney tests for plant number (2003 field data). Bold = signif. difference (<0.05); bold italic = mod. signif. difference (<0.10). DAP = Disturbed Alluvial Plain; FP = Floodplain; SFS = South-facing Slopes; RT = Ridge Tops; NFS = North-facing Slopes; TT = Terrace Tops; LS = Limestone Soils. Perennial Bunchgrass Plant Community Study, Centennial Specific Plan Project Site, Los Angeles County, CA.

Native Forbs							
	DAP	FP	SFS	RT	NFS	TT	LS
DAP	0	0.216	**0.007**	**0.011**	**0.002**	0.505	**0.010**
FP		0	**0.013**	***0.054***	**0.002**	0.162	**0.006**
SFS			0	1.000	0.453	**0.011**	0.906
RT				0	0.471	**0.034**	0.747
NFS					0	**0.006**	0.346
TT						0	**0.014**
LS							0
Native Perennial Bunchgrasses							
	DAP	FP	SFS	RT	NFS	TT	LS
DAP	0	0.377	**0.000**	**0.001**	**0.000**	**0.003**	**0.011**
FP		0	**0.006**	**0.002**	**0.001**	**0.006**	***0.088***
SFS			0	0.124	0.122	0.182	0.409
RT				0	0.847	0.942	***0.053***
NFS					0	1.000	**0.045**
TT						0	**0.083**
LS							0
All Native Plants							
	DAP	FP	SFS	RT	NFS	TT	LS
DAP	0	0.233	**0.005**	**0.005**	**0.002**	0.351	**0.006**
FP		0	**0.009**	**0.011**	**0.002**	0.463	**0.004**
SFS			0	0.923	0.310	**0.028**	0.814
RT				0	0.387	**0.010**	0.366
NFS					0	**0.008**	0.216
TT						0	**0.018**
LS							0
Non-native Forbs							
	DAP	FP	SFS	RT	NFS	TT	LS
DAP	0	**0.001**	**0.002**	**0.012**	**0.002**	**0.009**	0.263
FP		0	0.724	0.630	0.724	0.842	**0.022**
SFS			0	0.885	1.000	1.000	**0.045**
RT				0	0.885	0.884	0.121
NFS					0	1.000	**0.045**
TT						0	***0.083***
LS							0
Non-native Annual Grasses							
	DAP	FP	SFS	RT	NFS	TT	LS
DAP	0	0.289	0.757	0.112	0.145	***0.096***	**0.045**
FP		0	0.133	**0.006**	**0.008**	**0.008**	0.289
SFS			0	0.149	0.310	0.125	**0.029**
RT				0	0.441	0.884	**0.006**
NFS					0	0.317	**0.005**
TT						0	**0.011**
LS							0
All Non-native Plants							
	DAP	FP	SFS	RT	NFS	TT	LS
DAP	0	0.289	***0.070***	**0.011**	**0.006**	**0.014**	0.216
FP		0	0.171	**0.024**	**0.013**	**0.011**	**0.039**
SFS			0	0.471	0.566	0.257	**0.016**
RT				0	0.885	0.608	**0.004**
NFS					0	0.386	**0.002**
TT						0	**0.008**
LS							0

Table 5.13 Mann-Whitney tests for relative plant cover (2003 field data). Bold = signif. difference (<0.05); bold italic = mod. significant difference (<0.10). DAP = Disturbed Alluvial Plain; FP = Floodplain; SFS = South-facing Slopes; RT = Ridge Tops; NFS = North-facing Slopes; TT = Terrace Tops; LS = Limestone Soils. Perennial Plant Community Study, Centennial Specific Plan Project Site, Los Angeles County, CA.

Native Forbs							
	DAP	FP	SFS	RT	NFS	TT	LS
DAP	0	**0.000**	**0.000**	**0.002**	**0.000**	**0.002**	**0.000**
FP		0	**0.000**	0.624	**0.003**	0.813	**0.000**
SFS			0	**0.002**	**0.006**	0.189	**0.002**
RT				0	0.146	0.613	**0.000**
NFS					0	0.637	**0.000**
TT						0	**0.012**
LS							0
Native Perennial Bunchgrasses							
	DAP	FP	SFS	RT	NFS	TT	LS
DAP	0	0.333	**0.008**	**0.000**	**0.000**	**0.000**	**0.007**
FP		0	***0.053***	**0.000**	**0.000**	**0.000**	***0.066***
SFS			0	**0.000**	**0.000**	**0.000**	0.817
RT				0	0.238	***0.081***	**0.000**
NFS					0	0.106	**0.000**
TT						0	**0.000**
LS							0
All Native Plants							
	DAP	FP	SFS	RT	NFS	TT	LS
DAP	0	**0.001**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**
FP		0	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**
SFS			0	***0.070***	0.201	0.713	**0.007**
RT				0	0.299	0.306	0.322
NFS					0	0.684	**0.019**
TT						0	***0.083***
LS							0
Non-native Forbs							
	DAP	FP	SFS	RT	NFS	TT	LS
DAP	0	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**
FP		0	**0.000**	**0.000**	**0.000**	**0.002**	**0.000**
SFS			0	0.828	0.139	0.319	***0.093***
RT				0	0.299	0.444	**0.034**
NFS					0	0.969	**0.001**
TT						0	**0.030**
LS							0
Non-native Annual Grasses							
	DAP	FP	SFS	RT	NFS	TT	LS
DAP	0	**0.017**	**0.004**	0.806	0.183	0.306	**0.001**
FP		0	0.337	**0.011**	0.130	0.227	0.303
SFS			0	**0.004**	**0.022**	***0.062***	0.746
RT				0	0.199	0.634	**0.000**
NFS					0	0.927	**0.009**
TT						0	***0.055***
LS							**0**
All Non-native Plants							
	DAP	FP	SFS	RT	NFS	TT	LS
DAP	0	**0.001**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**
FP		0	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**
SFS			0	**0.044**	0.201	0.713	**0.007**
RT				0	0.227	0.254	0.374
NFS					0	0.684	**0.019**
TT						0	***0.083***
LS							0

Table 5.14 Summary of 2003 plots sampled for the perennial bunchgrass plant community study. Centennial Specific Plan Project Site, Los Angeles County, California.

Transect Number	Plot Number	Landscape Position
T1	P1	Disturbed Alluvial Plain
T1	P2	Disturbed Alluvial Plain
T1	P3	Disturbed Alluvial Plain
T2	P4	Disturbed Alluvial Plain
T2	P5	Disturbed Alluvial Plain
T2	P6	Disturbed Alluvial Plain
T2	P7	Disturbed Alluvial Plain
T2	P8	Disturbed Alluvial Plain
T2	P9	Disturbed Alluvial Plain
T3	P10	Floodplain
T3	P11	Floodplain
T3	P12	South-facing Slope
T3	P13	Ridge Top
T3	P14	North-facing Slope
T3	P15	Floodplain
T3	P16	South-facing Slope
T3	P17	Terrace Top
T3	P18	North-facing Slope
T3	P19	Floodplain
T3	P20	South-facing Slope
T3	P21	Ridge Top
T3	P22	North-facing Slope
T6	P23	Floodplain
T6	P24	South-facing Slope
T6	P25	Ridge Top
T6	P26	North-facing Slope
T6	P27	Floodplain
T6	P28	South-facing Slope
T6	P29	Ridge Top
T6	P30	North-facing Slope
T6	P31	Floodplain
T6	P32	South-facing Slope
T6	P33	Ridge Top
T6	P34	North-facing Slope
T7	P35	Limestone Soils
T7	P36	Limestone Soils
T8	P37	South-facing Slope
T8	P38	Ridge Top
T8	P39	North-facing Slope
T8	P40	Floodplain
T8	P41	Floodplain
T8	P42	South-facing Slope
T8	P43	Terrace Top
T8	P44	South-facing Slope
T8	P45	Ridge Top
T8	P46	North-facing Slope
T8	P47	Ridge Top
T8	P48	North-facing Slope
T9	P49	Terrace Top
T10	P50	Terrace Top
T10	P51	Terrace Top
T4	P52	Limestone Soils
T4	P53	Limestone Soils
T4	P54	Limestone Soils
T5	P55	Limestone Soils

Table 5.15 Summary of 2004 plots sampled for the perennial bunchgrass plant community study. Centennial Specific Plan Project Site, Los Angeles County, California.

Transect Number	Plot Number	Landscape Position
T1	P1	Ridgetop
T1	P2	North-facing, Upper, Convex Slopes
T1	P3	North-facing, Lower, Concave Slopes
T1	P4	South-facing, Lower, Concave Slopes
T1	P5	South-facing, Upper, Convex Slopes
T1	P6	Ridgetop
T1	P7	North-facing, Upper, Convex Slopes
T1	P8	North-facing, Lower, Concave Slopes
T1	P9	Floodplain
T1	P10	South-facing, Lower, Concave Slopes
T1	P11	South-facing, Upper, Convex Slopes
T1	P12	Ridgetop
T1	P13	North-facing, Upper, Concave Slopes
T1	P14	North-facing, Upper, Convex Slopes
T1	P15	North-facing, Lower Convex Slopes
T1	P16	Floodplain
T1	P17	South-facing, Lower, Concave Slopes
T1	P18	South-facing, Upper, Convex Slopes
T3	P1	Ridgetop
T3	P2	South-facing, Upper, Convex Slopes
T3	P3	South-facing, Lower, Concave Slopes
T3	P4	Floodplain
T3	P5	North-facing, Lower, Concave Slopes
T3	P6	North-facing, Upper, Convex Slopes
T3	P7	Ridgetop
T3	P8	South-facing, Upper, Convex Slopes
T3	P9	South-facing, Lower, Concave Slopes
T3	P10	North-facing, Lower, Concave Slopes
T3	P11	North-facing, Upper, Concave Slopes
T3	P12	Ridgetop
T3	P13	South-facing, Lower, Concave Slopes
T3	P14	South-facing, Lower, Concave Slopes
T3	P15	Ridgetop
T3	P16	North-facing, Upper, Convex Slopes
T3	P17	North-facing, Upper, Concave Slopes
T3	P18	North-facing, Upper, Concave Slopes
T3	P19	Ridgetop
T3	P20	Ridgetop
T3	P21	South-facing, Upper, Convex Slopes
T3	P22	South-facing, Lower, Convex Slopes
T3	P23	Floodplain
T3	P24	North-facing, Lower, Concave Slopes
T3	P25	North-facing, Upper, Convex Slopes
T3	P26	Ridgetop
T3	P27	South-facing, Upper, Convex Slopes
T3	P28	South-facing, Lower, Concave Slopes
T3	P29	North-facing, Lower, Concave Slopes
T3	P30	North-facing, Upper, Convex Slopes
T3	P31	North-facing, Upper, Concave Slopes
T3	P32	Ridgetop
T5	P1	Ridgetop
T5	P2	North-facing, Upper, Convex Slopes
T5	P3	North-facing, Lower, Concave Slopes
T5	P4	South-facing, Lower, Convex Slopes

Transect Number	Plot Number	Landscape Position
T5	P5	South-facing, Upper, Convex Slopes
T5	P6	Ridgetop
T5	P7	North-facing, Upper, Convex Slopes
T5	P8	Floodplain
T5	P9	South-facing, Lower, Concave Slopes
T5	P10	South-facing, Upper, Convex Slopes
T5	P11	Ridgetop
T5	P12	North-facing, Upper, Concave Slopes
T5	P13	North-facing, Lower Convex Slopes
T5	P14	South-facing, Lower, Convex Slopes
T5	P15	South-facing, Upper, Convex Slopes
T5	P16	Ridgetop
T5	P17	North-facing, Upper, Convex Slopes
T5	P18	North-facing, Lower, Concave Slopes
T5	P19	South-facing, Lower, Convex Slopes
T5	P20	South-facing, Upper, Concave Slopes
T5	P21	Ridgetop
T5	P22	North-facing, Upper, Concave Slopes
T5	P23	North-facing, Lower Convex Slopes
T5	P24	South-facing, Lower, Concave Slopes
T5	P25	Ridgetop
T5	P26	South-facing, Upper, Convex Slopes
T5	P27	North-facing, Upper, Concave Slopes
T5	P28	Ridgetop
T5	P29	North-facing, Upper, Convex Slopes
T5	P30	North-facing, Lower, Concave Slopes
T5	P31	South-facing, Lower, Convex Slopes
T5	P32	South-facing, Upper, Convex Slopes
T5	P33	Ridgetop
T5	P34	North-facing, Upper, Convex Slopes
T5	P35	North-facing, Lower, Concave Slopes
T5	P36	Floodplain
T5	P37	South-facing, Lower, Concave Slopes
T5	P38	South-facing, Upper, Convex Slopes
T5	P39	Ridgetop
T5	P40	North-facing, Upper, Convex Slopes
T5	P41	North-facing, Lower, Concave Slopes
T5	P42	Ridgetop
T5	P43	Ridgetop
T5	P44	North-facing, Upper, Convex Slopes
T5	P45	North-facing, Lower, Concave Slopes
T5	P46	South-facing, Lower, Convex Slopes
T5	P47	South-facing, Upper, Convex Slopes
T5	P48	Ridgetop
T5	P49	North-facing, Upper, Concave Slopes
T5	P50	North-facing, Lower Convex Slopes
T5	P51	South-facing, Lower, Convex Slopes
T5	P52	South-facing, Upper, Concave Slopes
T5	P53	Ridgetop
T5	P54	North-facing, Upper, Convex Slopes
T5	P55	North-facing, Lower Convex Slopes
T6	P1	South-facing, Lower, Convex Slopes
T6	P2	Ridgetop
T6	P3	South-facing, Upper, Convex Slopes
T6	P4	North-facing, Upper, Convex Slopes
T6	P5	North-facing, Lower Convex Slopes
T6	P6	South-facing, Lower, Convex Slopes
T6	P7	Ridgetop

Transect Number	Plot Number	Landscape Position
T6	P8	South-facing, Upper, Convex Slopes
T6	P9	North-facing, Upper, Concave Slopes
T6	P10	North-facing, Lower Convex Slopes
T6	P11	Ridgetop
T6	P12	North-facing, Upper, Convex Slopes
T6	P13	South-facing, Lower, Concave Slopes
T6	P14	South-facing, Upper, Convex Slopes
T6	P15	Ridgetop
T6	P16	North-facing, Upper, Concave Slopes
T6	P17	North-facing, Lower Convex Slopes
T6	P18	South-facing, Lower, Concave Slopes
T6	P19	South-facing, Upper, Convex Slopes
T6	P20	Ridgetop
T6	P21	North-facing, Upper, Convex Slopes
T6	P22	North-facing, Upper, Convex Slopes
T6	P23	North-facing, Lower, Concave Slopes
T6	P24	Floodplain
T6	P25	South-facing, Lower, Concave Slopes
T6	P26	South-facing, Upper, Convex Slopes
T6	P27	Ridgetop
T6	P28	North-facing, Upper, Concave Slopes
T6	P29	North-facing, Lower Convex Slopes
T6	P30	South-facing, Upper, Convex Slopes
T6	P31	Ridgetop
T6	P32	North-facing, Upper, Concave Slopes
T6	P33	North-facing, Lower Convex Slopes
T6	P34	Ridgetop
T6	P35	South-facing, Lower, Concave Slopes
T6	P36	South-facing, Upper, Convex Slopes
T6	P37	Ridgetop
T6	P38	North-facing, Upper, Concave Slopes
T6	P39	North-facing, Lower Convex Slopes
T6	P40	South-facing, Lower, Concave Slopes
T6	P41	South-facing, Upper, Convex Slopes
T6	P42	Ridgetop
T7	P1	South-facing, Lower, Convex Slopes
T7	P2	North-facing, Lower Convex Slopes
T7	P3	North-facing, Upper, Concave Slopes
T7	P4	Ridgetop
T7	P5	South-facing, Upper, Convex Slopes
T7	P6	South-facing, Lower, Concave Slopes
T7	P7	North-facing, Lower, Concave Slopes
T7	P8	North-facing, Upper, Concave Slopes
T7	P9	Ridgetop
T7	P10	South-facing, Upper, Convex Slopes
T7	P11	South-facing, Lower, Concave Slopes
T7	P12	North-facing, Lower Convex Slopes
T7	P13	North-facing, Upper, Convex Slopes
T7	P14	Ridgetop
T7	P15	Ridgetop
T7	P16	South-facing, Upper, Convex Slopes
T7	P17	South-facing, Lower, Concave Slopes
T7	P18	Floodplain
T7	P19	North-facing, Lower, Concave Slopes
T7	P20	North-facing, Upper, Concave Slopes
T7	P21	Ridgetop
T7	P22	South-facing, Upper, Convex Slopes
T7	P23	North-facing, Lower, Concave Slopes

Transect Number	Plot Number	Landscape Position
T7	P24	North-facing, Lower Convex Slopes
T7	P25	North-facing, Upper, Convex Slopes
T7	P26	Ridgetop
T7	P27	South-facing, Upper, Concave Slopes
T7	P28	South-facing, Lower, Concave Slopes
T7	P29	North-facing, Upper, Convex Slopes
T7	P30	Ridgetop
T7	P31	South-facing, Upper, Convex Slopes
T7	P32	South-facing, Lower, Concave Slopes
T7	P33	North-facing, Lower Convex Slopes
T7	P34	North-facing, Upper, Convex Slopes
T7	P35	South-facing, Upper, Convex Slopes
T7	P36	South-facing, Lower, Convex Slopes
T7	P37	North-facing, Lower, Concave Slopes
T7	P38	North-facing, Upper, Convex Slopes
T7	P39	Ridgetop
T7	P40	North-facing, Lower, Concave Slopes
T7	P41	North-facing, Upper, Convex Slopes
T7	P42	Ridgetop
T7	P43	South-facing, Upper, Convex Slopes
T7	P44	South-facing, Lower, Concave Slopes
T7	P45	North-facing, Lower, Concave Slopes
T7	P46	North-facing, Lower, Concave Slopes
T7	P47	Ridgetop
T7	P48	South-facing, Upper, Convex Slopes
T7	P49	South-facing, Lower, Concave Slopes
T7	P50	Floodplain
T7	P51	North-facing, Lower Convex Slopes
T7	P52	North-facing, Upper, Concave Slopes
T7	P53	Ridgetop
T9	P1	North-facing, Upper, Concave Slopes
T9	P2	North-facing, Lower, Concave Slopes
T9	P3	Ridgetop
T9	P4	South-facing, Upper, Convex Slopes
T9	P5	North-facing, Lower Convex Slopes
T9	P6	North-facing, Lower, Concave Slopes
T9	P7	North-facing, Upper, Concave Slopes
T9	P8	Ridgetop
T9	P9	South-facing, Upper, Convex Slopes
T9	P10	South-facing, Upper, Convex Slopes
T9	P11	South-facing, Upper, Convex Slopes
T9	P12	South-facing, Lower, Concave Slopes
T9	P13	North-facing, Upper, Convex Slopes
T9	P14	North-facing, Lower, Concave Slopes
T9	P15	Ridgetop
T9	P16	Ridgetop
T9	P17	South-facing, Upper, Convex Slopes
T9	P18	South-facing, Upper, Convex Slopes
T9	P19	South-facing, Lower, Concave Slopes
T9	P20	South-facing, Lower, Convex Slopes
T9	P21	Floodplain
T9	P22	South-facing, Lower, Convex Slopes
T9	P23	South-facing, Lower, Concave Slopes
T9	P24	South-facing, Upper, Convex Slopes
T9	P25	South-facing, Upper, Convex Slopes
T9	P26	Ridgetop
T9	P27	North-facing, Lower Convex Slopes
T9	P28	North-facing, Upper, Convex Slopes

Transect Number	Plot Number	Landscape Position
T9	P29	North-facing, Upper, Concave Slopes
T9	P30	Ridgetop
T9	P31	South-facing, Upper, Convex Slopes
T9	P32	South-facing, Upper, Convex Slopes
T9	P33	South-facing, Lower, Convex Slopes
T9	P34	South-facing, Lower, Concave Slopes
T9	P35	Floodplain
T9	P36	North-facing, Lower, Concave Slopes
T9	P37	North-facing, Upper, Convex Slopes
T9	P38	South-facing, Upper, Convex Slopes
T9	P39	South-facing, Lower, Concave Slopes
T9	P40	Floodplain
T9	P41	North-facing, Lower, Concave Slopes
T9	P42	North-facing, Upper, Convex Slopes
T9	P43	North-facing, Upper, Convex Slopes
T9	P44	Ridgetop
T9	P45	South-facing, Upper, Convex Slopes
T9	P46	South-facing, Lower, Concave Slopes
T9	P47	Floodplain
T9	P48	North-facing, Lower Convex Slopes
T9	P49	North-facing, Upper, Convex Slopes
T9	P50	Ridgetop
T9	P51	North-facing, Upper, Convex Slopes
T9	P52	South-facing, Upper, Convex Slopes
T9	P53	South-facing, Lower, Concave Slopes
T11	P1	Ridgetop
T11	P2	North-facing, Upper, Concave Slopes
T11	P3	North-facing, Upper, Convex Slopes
T11	P4	North-facing, Lower, Concave Slopes
T11	P5	North-facing, Upper, Convex Slopes
T11	P6	South-facing, Lower, Convex Slopes
T11	P7	South-facing, Lower, Concave Slopes
T11	P8	South-facing, Upper, Convex Slopes
T11	P9	South-facing, Upper, Convex Slopes
T11	P10	Ridgetop
T11	P11	North-facing, Upper, Convex Slopes
T11	P12	North-facing, Upper, Concave Slopes
T11	P13	Floodplain
T11	P14	South-facing, Lower, Convex Slopes
T11	P15	South-facing, Upper, Convex Slopes
T11	P16	Ridgetop
T11	P17	South-facing, Upper, Convex Slopes
T11	P18	South-facing, Upper, Convex Slopes
T11	P19	North-facing, Upper, Convex Slopes
N/A	FP1	Floodplain
N/A	FP2	Floodplain
N/A	FP3	Floodplain
N/A	FP4	Floodplain
N/A	FP5	Floodplain
N/A	FP6	Floodplain

Table 5.16 Summary of 2004 soil sample plot locations for the perennial bunchgrass community study. Centennial Specific Plan Project Site, Los Angeles County, California.

Transect Number	Plot Number	Landscape Position
N/A	FP2	Floodplain
T3	P23	Floodplain
T3	P4	Floodplain
T5	P36	Floodplain
T7	P50	Floodplain
T3	P18	North-facing Lower Concave Slope
T3	P29	North-facing Lower Concave Slope
T7	P19	North-facing Lower Concave Slope
T7	P23	North-facing Lower Concave Slope
T7	P40	North-facing Lower Concave Slope
T7	P46	North-facing Lower Concave Slope
T5	P50	North-facing Lower Convex Slope
T7	P24	North-facing Lower Convex Slope
T7	P33	North-facing Lower Convex Slope
T3	P11	North-facing Upper Concave Slope
T3	P31	North-facing Upper Concave Slope
T5	P12	North-facing Upper Concave Slope
T5	P22	North-facing Upper Concave Slope
T3	P30	North-facing Upper Convex Slope
T3	P6	North-facing Upper Convex Slope
T5	P34	North-facing Upper Convex Slope
T5	P54	North-facing Upper Convex Slope
T7	P29	North-facing Upper Convex Slope
T3	P26	Ridge top
T3	P32	Ridge top
T7	P15	Ridge top
T7	P30	Ridge top
T7	P39	Ridge top
T3	P2	South-facing Upper Convex Slope
T3	P21	South-facing Upper Convex Slope
T5	P10	South-facing Upper Convex Slope
T5	P32	South-facing Upper Convex Slope
T5	P38	South-facing Upper Convex Slope
N/A	ACSP4	South-facing Upper Concave Slope
N/A	ACSP21	South-facing Upper Concave Slope
T5	P20	South-facing Upper Concave Slope
T5	P52	South-facing Upper Concave Slope
T7	P27	South-facing Upper Concave Slope
T5	P14	South-facing Lower Convex Slope
T5	P46	South-facing Lower Convex Slope
T7	P36	South-facing Lower Convex Slope
T3	P28	South-facing Lower Concave Slope
T3	P3	South-facing Lower Concave Slope
T7	P17	South-facing Lower Concave Slope
T7	P44	South-facing Lower Concave Slope
T7	P49	South-facing Lower Concave Slope

Table 5.17 Descriptive statistics for relative plant cover and bare soil by landscape position (spring 2004 field data). Perennial Bunch Grass Community Study, Centennial Specific Plan Project Site, Los Angeles County, California.

FLOODPLAIN

Species:	N	N*	Mean	SE Mean	St Dev	Q1	Med	Q3	Min	Max
Acnatherum speciosum	20	0	0	0.00	0.00	0	0	0	0	0
Elymus mutisetus	20	0	0.1	0.10	0.45	0	0	0	0	2
Nasella cernua	20	0	0.1	0.10	0.45	0	0	0	0	2
Poa secunda ssp. secunda	20	0	2.25	1.26	5.66	0	0	2	0	25
Total Perennial Bunch Grasses	20	0	2.45	1.29	5.79	0	0	2	0	25
Leymus triticoides	20	0	6.55	2.15	9.63	0	2	8.75	0	30
Vulpia bromoides	20	0	0	0.00	0.00	0	0	0	0	0
Vulpia microstachys var. microstachys	20	0	0.25	0.25	1.12	0	0	0	0	5
Vulpia myuros var. myuros	20	0	0.25	0.25	1.12	0	0	0	0	5
Avena barbata	20	0	0	0.00	0.00	0	0	0	0	0
Bromus diandrus	20	0	7.4	4.39	19.65	0	0	1.75	0	80
Bromus hordeaceus	20	0	1.3	1.02	4.54	0	0	0	0	20
Bromus madritensis ssp. rubens	20	0	8.35	2.20	9.84	2.75	5	10	0	40
Bromus tectorum	20	0	15.15	3.63	16.22	3.5	10	23.75	1	65
Total Non-Native Annual Grasses	20	0	32.7	5.80	25.95	13.25	25.5	40	1	90
Total Forbs	20	0	37.25	4.27	19.09	15	42.5	50	5	60
Bare Soil	20	0	20.2	3.52	15.72	11.25	15	30	2	65

NORTH SLOPES, LOWER, CONCAVE

Species	N	N*	Mean	SE Mean	St Dev	Q1	Med	Q3	Min	Max
Acnatherum speciosum	26	0	0.00	0.00	0.00	0	0	0	0	0
Elymus mutisetus	26	0	0.15	0.09	0.46	0	0	0	0	2
Nasella cernua	26	0	1.35	0.55	2.80	0	0	2	0	10
Poa secunda ssp. secunda	26	0	17.62	2.31	11.80	5	20	30	0	35
Total Perennial Bunch Grasses	26	0	19.08	2.35	11.98	5.75	20	30	0	37
Leymus triticoides	26	0	5.08	1.70	8.65	0	0	10	0	30
Vulpia bromoides	26	0	0.00	0.00	0.00	0	0	0	0	0
Vulpia microstachys var. microstachys	26	0	0.00	0.00	0.00	0	0	0	0	0
Vulpia myuros var. myuros	26	0	0.19	0.19	0.98	0	0	0	0	5
Avena barbata	26	0	0.08	0.08	0.39	0	0	0	0	2
Bromus diandrus	26	0	0.58	0.58	2.94	0	0	0	0	15
Bromus hordeaceus	26	0	0.62	0.58	2.94	0	0	0	0	15
Bromus madritensis ssp. rubens	26	0	10.54	2.84	14.49	2.75	5	11.25	2	70
Bromus tectorum	26	0	11.73	2.47	12.60	1.75	10	20	0	50
Total Non-Native Annual Grasses	26	0	23.73	4.14	21.09	7.5	15	32.75	2	80
Total Forbs	26	0	32.12	2.06	10.50	28.75	30	40	5	50
Total Bare Soil	26	0	20.00	1.88	9.59	13.75	20	26.25	5	40

NORTH SLOPES, LOWER CONVEX

Species	N	N*	Mean	SE Mean	St Dev	Q1	Med	Q3	Min	Max
Acnatherum speciosum	19	0	0.53	0.36	1.58	0	0	0	0	5

Elymus mutisetus	19	0	2.21	0.93	4.04	0	0	2	0	15
Nasella cernua	19	0	2.37	0.86	3.74	0	0	5	0	10
Poa secunda ssp. secunda	19	0	17.89	2.40	10.45	10	20	30	0	35
Total Perennial Bunch Grasses	19	0	23.00	2.77	12.08	10	30	32	6	40
Leymus triticoides	19	0	2.11	0.96	4.19	0	0	5	0	15
Vulpia bromoides	19	0	0.00	0.00	0.00	0	0	0	0	0
Vulpia microstachys var. microstachys	19	0	0.00	0.00	0.00	0	0	0	0	0
Vulpia myuros var. myuros	19	0	0.00	0.00	0.00	0	0	0	0	0
Avena barbata	19	0	0.00	0.00	0.00	0	0	0	0	0
Bromus diandrus	19	0	0.00	0.00	0.00	0	0	0	0	0
Bromus hordeaceus	19	0	0.58	0.53	2.29	0	0	0	0	10
Bromus madritensis ssp. rubens	19	0	8.53	2.76	12.01	2	5	10	0	50
Bromus tectorum	19	0	6.63	2.41	10.52	0	1	10	0	40
Total Non-Native Annual Grasses	19	0	15.74	3.58	15.58	3	10	20	0	50
Total Forbs	19	0	30.79	2.40	10.44	25	30	40	15	50
Total Bare Soil	19	0	28.42	2.10	9.14	20	30	35	10	45

NORTH SLOPES, UPPER, CONCAVE

Species	N	N*	Mean	SE Mean	St Dev	Q1	Med	Q3	Min	Max
Acnatherum speciosum	23	0	0.57	0.40	1.93	0	0	0	0	8
Elymus mutisetus	23	0	3.00	0.87	4.18	0	1	5	0	15
Nasella cernua	23	0	4.00	1.07	5.13	0	2	5	0	20
Poa secunda ssp. secunda	23	0	21.74	1.95	9.37	20	25	30	0	35
Total Perennial Bunch Grasses	23	0	29.30	2.33	11.19	28	32	35	0	45
Leymus triticoides	23	0	1.30	0.65	3.10	0	0	0	0	10
Vulpia bromoides	23	0	0.00	0.00	0.00	0	0	0	0	0
Vulpia microstachys var. microstachys	23	0	0.00	0.00	0.00	0	0	0	0	0
Vulpia myuros var. myuros	23	0	0.00	0.00	0.00	0	0	0	0	0
Avena barbata	23	0	0.00	0.00	0.00	0	0	0	0	0
Bromus diandrus	23	0	0.00	0.00	0.00	0	0	0	0	0
Bromus hordeaceus	23	0	0.00	0.00	0.00	0	0	0	0	0
Bromus madritensis ssp. rubens	23	0	4.83	1.01	4.86	1	5	5	0	20
Bromus tectorum	23	0	5.52	3.09	14.84	0	1	2	0	70
Total Non-Native Annual Grasses	23	0	10.35	3.26	15.64	2	5	12	0	72
Total Forbs	23	0	28.26	1.82	8.74	25	25	30	15	55
Total Bare Soil	23	0	30.48	2.33	11.16	25	35	40	2	45

NORTH SLOPES, UPPER, CONVEX

Species	N	N*	Mean	SE Mean	St Dev	Q1	Med	Q3	Min	Max
Acnatherum speciosum	36	0	2.36	1.24	7.41	0	0	0	0	40
Elymus mutisetus	36	0	2.33	0.52	3.12	0	1	4.5	0	10
Nasella cernua	36	0	5.64	0.91	5.43	1.25	5	9.25	0	20
Poa secunda ssp. secunda	36	0	22.97	1.51	9.07	16.25	25	30	2	40
Total Perennial Bunch Grasses	36	0	33.31	1.29	7.75	30	35	40	8	45
Leymus triticoides	36	0	0.97	0.52	3.14	0	0	0	0	15
Vulpia bromoides	36	0	0.00	0.00	0.00	0	0	0	0	0

Vulpia microstachys var. microstachys	36	0	0.00	0.00	0.00	0	0	0	0	0
Vulpia myuros var. myuros	36	0	0.00	0.00	0.00	0	0	0	0	0
Avena barbata	36	0	0.03	0.03	0.17	0	0	0	0	1
Bromus diandrus	36	0	0.00	0.00	0.00	0	0	0	0	0
Bromus hordeaceus	36	0	0.14	0.11	0.68	0	0	0	0	4
Bromus madritensis ssp. rubens	36	0	4.86	0.79	4.76	2	5	5	0	20
Bromus tectorum	36	0	1.25	0.33	2.01	0	0.5	2	0	10
Total Non-Native Annual Grasses	36	0	6.28	0.92	5.53	2.25	5	7	1	22
Total Forbs	36	0	27.78	1.62	9.74	20	27.5	35	10	50
Total Bare Soil	36	0	32.64	2.06	12.33	25	35	40	5	50

RIDGE TOP

Species	N	N*	Mean	SE Mean	St Dev	Q1	Med	Q3	Min	Max
Acnatherum speciosum	56	0	1.63	0.60	4.45	0	0	0	0	20
Elymus mutisetus	56	0	0.96	0.30	2.22	0	0	1	0	10
Nasella cernua	56	0	17.71	0.97	7.24	10	20	25	0	30
Poa secunda ssp. secunda	56	0	12.02	1.01	7.60	5	10	18.75	0	35
Total Perennial Bunch Grasses	56	0	32.32	1.20	8.99	30	34.5	40	1	45
Leymus triticoides	56	0	0.00	0.00	0.00	0	0	0	0	0
Vulpia bromoides	56	0	0.00	0.00	0.00	0	0	0	0	0
Vulpia microstachys var. microstachys	56	0	0.00	0.00	0.00	0	0	0	0	0
Vulpia myuros var. myuros	56	0	0.02	0.02	0.13	0	0	0	0	1
Avena barbata	56	0	0.13	0.10	0.72	0	0	0	0	5
Bromus diandrus	56	0	0.00	0.00	0.00	0	0	0	0	0
Bromus hordeaceus	56	0	0.00	0.00	0.00	0	0	0	0	0
Bromus madritensis ssp. rubens	56	0	3.30	0.50	3.74	1	2	5	0	20
Bromus tectorum	56	0	0.63	0.37	2.75	0	0	0	0	20
Total Non-Native Annual Grasses	56	0	4.07	0.69	5.14	1	3	5	0	30
Total Forbs	56	0	22.68	1.22	9.14	15	25	30	0	40
Total Bare Soil	56	0	40.63	1.73	12.97	30	40	50	0	70

SOUTH SLOPES, UPPER, CONVEX

Species	N	N*	Mean	SE Mean	St Dev	Q1	Med	Q3	Min	Max
Acnatherum speciosum	33	0	0.03	0.03	0.17	0	0	0	0	1
Elymus mutisetus	33	0	0.18	0.15	0.88	0	0	0	0	5
Nasella cernua	33	0	16.97	1.34	7.67	12.5	15	20	0	35
Poa secunda ssp. secunda	33	0	3.73	0.99	5.69	0	2	5	0	25
Total Perennial Bunch Grasses	33	0	20.91	1.82	10.46	13.5	20	27	5	45
Leymus triticoides	33	0	0.00	0.00	0.00	0	0	0	0	0
Vulpia bromoides	33	0	0.00	0.00	0.00	0	0	0	0	0
Vulpia microstachys var. microstachys	33	0	0.00	0.00	0.00	0	0	0	0	0
Vulpia myuros var. myuros	33	0	0.00	0.00	0.00	0	0	0	0	0
Avena barbata	33	0	1.00	0.63	3.63	0	0	0	0	20
Bromus diandrus	33	0	0	0	0	0	0	0	0	0
Bromus hordeaceus	33	0	0.06	0.06	0.35	0	0	0	0	2
Bromus madritensis ssp. rubens	33	0	10.97	2.04	11.70	5	5	15	1	60

Acnatherum speciosum	31	0	0.03	0.03	0.18	0	0	0	0	1
Elymus mutisetus	16	0	0.81	0.48	1.94	0	0	0	0	7
Elymus mutisetus	31	0	0.03	0.03	0.18	0	0	0	0	1
Nasella cernua	31	0	4.19	1.03	5.74	0	1	5	0	20
Poa secunda ssp. secunda	31	0	0.71	0.38	2.13	0	0	0	0	10
Total Perennial Bunch Grasses	31	0	4.97	1.13	6.30	0	1	8	0	20
Leymus triticoides	31	0	0.00	0.00	0.00	0	0	0	0	0
Vulpia bromoides	31	0	0.00	0.00	0.00	0	0	0	0	0
Vulpia microstachys var. microstachys	31	0	0.00	0.00	0.00	0	0	0	0	0
Vulpia myuros var. myuros	31	0	0.00	0.00	0.00	0	0	0	0	0
Avena barbata	31	0	2.26	1.07	5.98	0	0	1	0	30
Bromus diandrus	31	0	0.32	0.32	1.80	0	0	0	0	10
Bromus hordeaceus	31	0	0.55	0.49	2.71	0	0	0	0	15
Bromus madritensis ssp. rubens	31	0	17.97	2.77	15.44	8	15	25	1	70
Bromus tectorum	31	0	10.06	2.32	12.91	0	3	20	0	50
Total Non-Native Annual Grasses	31	0	31.16	3.99	22.24	13	25	45	2	85
Total Forbs	31	0	39.84	3.09	17.20	25	40	50	10	70
Total Bare Soil	31	0	22.32	1.98	11.04	15	20	30	2	45

Table 5.18 Descriptive statistics for relative plant cover and bare soil, by plant species (spring 2004 field data). Perennial Bunchgrass Plant Community Study, Centennial Specific Plan Project Site, Los Angeles County, California.

I. Annual Grasses

Slender oat grass (*Avena barbata*)	N	N*	Mean	SE Mean	St Dev	Q1	Med	Q3	Min	Max
Floodplain	20	0	0.00	0.00	0.00	0	0	0	0	0
North-facing Lower Concave Slope	26	0	0.08	0.08	0.39	0	0	0	0	2
North-facing Lower Convex Slope	19	0	0.00	0.00	0.00	0	0	0	0	0
North-facing Upper Concave Slope	23	0	0.00	0.00	0.00	0	0	0	0	0
North-facing Upper Convex Slope	36	0	0.03	0.03	0.17	0	0	0	0	1
Ridge top	56	0	0.13	0.10	0.72	0	0	0	0	5
South-facing Upper Convex Slope	33	0	1.00	0.63	3.63	0	0	0	0	20
South-facing Upper Concave Slope	18	0	3.28	1.75	7.43	0	0	2	0	25
South-facing Lower Convex Slope	16	0	3.44	1.42	5.69	0	0	5	0	20
South-facing Lower Concave Slope	31	0	2.26	1.07	5.98	0	0	1	0	30
Ripgut brome (*Bromus diandrus*)	N	N*	Mean	SE Mean	St Dev	Q1	Med	Q3	Min	Max
Floodplain	20	0	7.40	4.39	19.65	0	0	1.75	0	80
North-facing Lower Concave Slope	26	0	0.58	0.58	2.94	0	0	0	0	15
North-facing Lower Convext Slope	19	0	0.00	0.00	0.00	0	0	0	0	0
North-facing Upper Concave Slope	23	0	0.00	0.00	0.00	0	0	0	0	0
North-facing Upper Convex Slope	36	0	0.00	0.00	0.00	0	0	0	0	0
Ridge top	56	0	0.00	0.00	0.00	0	0	0	0	0
South-facing Upper Convex Slope	33	0	0.00	0.00	0.00	0	0	0	0	0
South-facing Upper Concave Slope	18	0	0.00	0.00	0.00	0	0	0	0	0
South-facing Lower Convex Slope	16	0	0.00	0.00	0.00	0	0	0	0	0
South-facing Lower Concave Slope	31	0	0.32	0.32	1.80	0	0	0	0	10
Soft chess (*Bromus hordeaceus*)	N	N*	Mean	SE Mean	St Dev	Q1	Med	Q3	Min	Max
Floodplain	20	0	1.30	1.02	4.54	0	0	0	0	20
North-facing Lower Concave Slope	26	0	0.62	0.58	2.94	0	0	0	0	15
North-facing Lower Convext Slope	19	0	0.58	0.53	2.29	0	0	0	0	10
North-facing Upper Concave Slope	23	0	0.00	0.00	0.00	0	0	0	0	0
North-facing Upper Convex Slope	36	0	0.14	0.11	0.68	0	0	0	0	4
Ridge top	56	0	0.00	0.00	0.00	0	0	0	0	0
South-facing Upper Convex Slope	33	0	0.06	0.06	0.35	0	0	0	0	2
South-facing Upper Concave Slope	18	0	0.39	0.29	1.24	0	0	0	0	5
South-facing Lower Convex Slope	16	0	0.31	0.22	0.87	0	0	0	0	3
South-facing Lower Concave Slope	31	0	0.55	0.49	2.71	0	0	0	0	15
Red brome (*Bromus madritensis* ssp. *rubens*)	N	N*	Mean	SE Mean	St Dev	Q1	Med	Q3	Min	Max
Floodplain	20	0	8.35	2.20	9.84	2.75	5	10	0	40
North-facing Lower Concave Slope	26	0	10.54	2.84	14.49	2.75	5	11.3	2	70
North-facing Lower Convex Slope	19	0	8.53	2.76	12.01	2	5	10	0	50
North-facing Upper Concave Slope	23	0	4.83	1.01	4.86	1	5	5	0	20
North-facing Upper Convex Slope	36	0	4.86	0.79	4.76	2	5	5	0	20
Ridge top	56	0	3.30	0.50	3.74	1	2	5	0	20
South-facing Upper Convex Slope	33	0	10.97	2.04	11.70	5	5	15	1	60
South-facing Upper Concave Slope	18	0	21.17	4.18	17.73	6.5	15	31.3	2	60
South-facing Lower Convex Slope	16	0	21.81	5.83	23.32	3.5	15	36.3	2	70

South-facing Lower Concave Slope	31	0	17.97	2.77	15.44	8	15	25	1	70
Cheat grass (*Bromus tectorum*)	N	N*	Mean	SE Mean	St Dev	Q1	Med	Q3	Min	Max
Floodplain	20	0	15.15	3.63	16.22	3.5	10	23.8	1	65
North-facing Lower Concave Slope	26	0	11.73	2.47	12.60	1.75	10	20	0	50
North-facing Lower Convext Slope	19	0	6.63	2.41	10.52	0	1	10	0	40
North-facing Upper Concave Slope	23	0	5.52	3.09	14.84	0	1	2	0	70
North-facing Upper Convex Slope	36	0	1.25	0.33	2.01	0	0.5	2	0	10
Ridge top	56	0	0.63	0.37	2.75	0	0	0	0	20
South-facing Upper Convex Slope	33	0	0.30	0.12	0.68	0	0	0	0	2
South-facing Upper Concave Slope	18	0	2.72	1.40	5.94	0	0	2	0	20
South-facing Lower Convex Slope	16	0	8.19	2.67	10.69	0	2	15	0	30
South-facing Lower Concave Slope	31	0	10.06	2.32	12.91	0	3	20	0	50
Six-weeks fescue (*Vulpia bromoides*)	N	N*	Mean	SE Mean	St Dev	Q1	Med	Q3	Min	Max
Floodplain	20	0.00	0.00	0.00	0.00	0	0	0	0	0
North-facing Lower Concave Slope	26	0.00	0.00	0.00	0.00	0	0	0	0	0
North-facing Lower Convext Slope	19	0.00	0.00	0.00	0.00	0	0	0	0	0
North-facing Upper Concave Slope	23	0.00	0.00	0.00	0.00	0	0	0	0	0
North-facing Upper Convex Slope	36	0.00	0.00	0.00	0.00	0	0	0	0	0
Ridge top	56	0.00	0.00	0.00	0.00	0	0	0	0	0
South-facing Upper Convex Slope	33	0.00	0.00	0.00	0.00	0	0	0	0	0
South-facing Upper Concave Slope	18	0.00	0.00	0.00	0.00	0	0	0	0	0
South-facing Lower Convex Slope	16	0.00	0.00	0.00	0.00	0	0	0	0	0
South-facing Lower Concave Slope	31	0.00	0.00	0.00	0.00	0	0	0	0	0
Small-flowered fescue (*Vulpia microstachys* var. *microstachys*)	N	N*	Mean	SE Mean	St Dev	Q1	Med	Q3	Min	Max
Floodplain	20	0.00	0.25	0.25	1.12	0	0	0	0	5
North-facing Lower Concave Slope	26	0.00	0.00	0.00	0.00	0	0	0	0	0
North-facing Lower Convext Slope	19	0.00	0.00	0.00	0.00	0	0	0	0	0
North-facing Upper Concave Slope	23	0.00	0.00	0.00	0.00	0	0	0	0	0
North-facing Upper Convex Slope	36	0.00	0.00	0.00	0.00	0	0	0	0	0
Ridge top	56	0.00	0.00	0.00	0.00	0	0	0	0	0
South-facing Upper Convex Slope	33	0.00	0.00	0.00	0.00	0	0	0	0	0
South-facing Upper Concave Slope	18	0.00	0.00	0.00	0.00	0	0	0	0	0
South-facing Lower Convex Slope	16	0.00	0.13	0.13	0.50	0	0	0	0	2
South-facing Lower Concave Slope	31	0.00	0.00	0.00	0.00	0	0	0	0	0
Rat-tail fescue (*Vulpia myuros* var. *myuros*)	N	N*	Mean	SE Mean	St Dev	Q1	Med	Q3	Min	Max
Floodplain	20	0.00	0.25	0.25	1.12	0	0	0	0	5
North-facing Lower Concave Slope	26	0.00	0.19	0.19	0.98	0	0	0	0	5
North-facing Lower Convext Slope	19	0.00	0.00	0.00	0.00	0	0	0	0	0
North-facing Upper Concave Slope	23	0.00	0.00	0.00	0.00	0	0	0	0	0
North-facing Upper Convex Slope	36	0.00	0.00	0.00	0.00	0	0	0	0	0
Ridge top	56	0.00	0.02	0.02	0.13	0	0	0	0	1
South-facing Upper Convex Slope	33	0.00	0.00	0.00	0.00	0	0	0	0	0
South-facing Upper Concave Slope	18	0.00	0.00	0.00	0.00	0	0	0	0	0
South-facing Lower Convex Slope	16	0.00	0.00	0.00	0.00	0	0	0	0	0
South-facing Lower Concave Slope	31	0.00	0.00	0.00	0.00	0	0	0	0	0
Total Annual Grasses	N	N*	Mean	SE Mean	St Dev	Q1	Med	Q3	Min	Max

Floodplain	20	0.00	32.70	5.80	25.95	13.3	25.5	40	1	90
North-facing Lower Concave Slope	26	0.00	23.73	4.14	21.09	7.5	15	32.8	2	80
North-facing Lower Convext Slope	19	0.00	15.74	3.58	15.58	3	10	20	0	50
North-facing Upper Concave Slope	23	0.00	10.35	3.26	15.64	2	5	12	0	72
North-facing Upper Convex Slope	36	0.00	6.28	0.92	5.53	2.25	5	7	1	22
Ridge top	56	0.00	4.07	0.69	5.14	1	3	5	0	30
South-facing Upper Convex Slope	33	0.00	12.33	2.26	12.96	5	7	17.5	1	65
South-facing Upper Concave Slope	18	0.00	27.56	5.63	23.89	9.75	18.5	50	2	85
South-facing Lower Convex Slpes	16	0	33.75	6.60	26.42	10.5	31.5	63.75	2	77
South-facing LowerConcave Sloes	31	0	31.16	3.99	22.24	13	25	45	2	85

II. Native Perennial Bunchgrasses

Desert Needlegrass (*Acnatherum speciosum)*	N	N*	Mean	SE Mean	St Dev	Q1	Med	Q3	Min	Max
Floodplain	20	0	0.00	0.00	0.00	0	0	0	0	0
North-facing Lower Concave Slope	26	0	0.00	0.00	0.00	0	0	0	0	0
North-facing Lower Convex Slope	19	0	0.53	0.36	1.58	0	0	0	0	5
North-facing Upper Concave Slope	23	0	0.57	0.40	1.93	0	0	0	0	8
North-facing Upper Convex Slope	36	0	2.36	1.24	7.41	0	0	0	0	40
Ridge top	56	0	1.63	0.60	4.45	0	0	0	0	20
South-facing Upper Convex Slope	33	0	0.03	0.03	0.17	0	0	0	0	1
South-facing Upper Concave Slope	18	0	0.06	0.06	0.24	0	0	0	0	1
South-facing Lower Convex Slope	16	0	0.00	0.00	0.00	0	0	0	0	0
South-facing Lower Concave Slope	31	0	0.03	0.03	0.18	0	0	0	0	1
Big squirreltail (*Elymus mutisetus)*	N	N*	Mean	SE Mean	St Dev	Q1	Med	Q3	Min	Max
Floodplain	20	0	0.10	0.10	0.45	0	0	0	0	2
North-facing Lower Concave Slope	26	0	0.15	0.09	0.46	0	0	0	0	2
North-facing Lower Convext Slope	19	0	2.21	0.93	4.04	0	0	2	0	15
North-facing Upper Concave Slope	23	0	3.00	0.87	4.18	0	1	5	0	15
North-facing Upper Convex Slope	36	0	2.33	0.52	3.12	0	1	4.5	0	10
Ridge top	56	0	0.96	0.30	2.22	0	0	1	0	10
South-facing Upper Convex Slope	33	0	0.18	0.15	0.88	0	0	0	0	5
South-facing Upper Concave Slope	18	0	0.11	0.11	0.47	0	0	0	0	2
South-facing Lower Convex Slope	16	0	0.81	0.48	1.94	0	0	0	0	7
South-facing Lower Concave Slope	16	0	0.81	0.48	1.94	0	0	0	0	7
Nodding Needlegrass (*Nasella cernua*)	N	N*	Mean	SE Mean	St Dev	Q1	Med	Q3	Min	Max
Floodplain	20	0	0.10	0.10	0.45	0	0	0	0	2
North-facing Lower Concave Slope	26	0	1.35	0.55	2.80	0	0	2	0	10
North-facing Lower Convext Slope	19	0	2.37	0.86	3.74	0	0	5	0	10
North-facing Upper Concave Slope	23	0	4.00	1.07	5.13	0	2	5	0	20
North-facing Upper Convex Slope	36	0	5.64	0.91	5.43	1.25	5	9.25	0	20
Ridge top	56	0	17.71	0.97	7.24	10	20	25	0	30
South-facing Upper Convex Slope	33	0	16.97	1.34	7.67	12.5	15	20	0	35
South-facing Upper Concave Slope	18	0	8.11	1.58	6.69	1.75	6.5	15	0	20
South-facing Lower Convex Slope	16	0	6.56	2.38	9.50	0	2	13.8	0	30
South-facing Lower Concave Slope	31	0	4.19	1.03	5.74	0	1	5	0	20

One-sided bluegrass (*Poa secunda* ssp. *secunda*)	N	N*	Mean	SE Mean	St Dev	Q1	Med	Q3	Min	Max
Floodplain	20	0	2.25	1.26	5.66	0	0	2	0	25
North-facing Lower Concave Slope	26	0	17.62	2.31	11.80	5	20	30	0	35
North-facing Lower Convext Slope	19	0	17.89	2.40	10.45	10	20	30	0	35
North-facing Upper Concave Slope	23	0	21.74	1.95	9.37	20	25	30	0	35
North-facing Upper Convex Slope	36	0	22.97	1.51	9.07	16.3	25	30	2	40
Ridge top	56	0	12.02	1.01	7.60	5	10	18.8	0	35
South-facing Upper Convex Slope	33	0	3.73	0.99	5.69	0	2	5	0	25
South-facing Upper Concave Slope	18	0	1.39	0.66	2.79	0	0	2	0	10
South-facing Lower Convex Slope	16	0	0.44	0.33	1.32	0	0	0	0	5
South-facing Lower Concave Slope	31	0	0.71	0.38	2.13	0	0	0	0	10
Total Perennial Bunchgrasses	N	N*	Mean	SE Mean	St Dev	Q1	Med	Q3	Min	Max
Floodplain	20	0	2.45	1.29	5.79	0	0	2	0	25
North-facing Lower Concave Slope	26	0	19.08	2.35	11.98	5.75	20	30	0	37
North-facing Lower Convext Slope	19	0	23.00	2.77	12.08	10	30	32	6	40
North-facing Upper Concave Slope	23	0	29.30	2.33	11.19	28	32	35	0	45
North-facing Upper Convex Slope	36	0	33.31	1.29	7.75	30	35	40	8	45
Ridge top	56	0	32.32	1.20	8.99	30	34.5	40	1	45
South-facing Upper Convex Slope	33	0	20.91	1.82	10.46	13.5	20	27	5	45
South-facing Upper Concave Slope	18	0	9.67	1.75	7.41	4.75	9	15.5	0	25
South-facing Lower Convex Slope	16	0	7.81	2.66	10.65	1	2	13.75	0	38
South-facing Lower Concave Slope	31	0	4.97	1.13	6.30	0	1	8	0	20

III. Native Sod Grasses

Alkali rye-grass (*Leymus triticoides*)	N	N*	Mean	SE Mean	St Dev	Q1	Med	Q3	Min	Max
Floodplain	20	0	6.55	2.15	9.63	0	2	8.75	0	30
North-facing Lower Concave Slope	26	0	5.08	1.70	8.65	0	0	10	0	30
North-facing Lower Convext Slope	19	0	2.11	0.96	4.19	0	0	5	0	15
North-facing Upper Concave Slope	23	0	1.30	0.65	3.10	0	0	0	0	10
North-facing Upper Convex Slope	36	0	0.97	0.52	3.14	0	0	0	0	15
Ridge top	56	0	0.00	0.00	0.00	0	0	0	0	0
South-facing Upper Convex Slope	33	0	0.00	0.00	0.00	0	0	0	0	0
South-facing Upper Concave Slope	18	0	0.28	0.28	1.18	0	0	0	0	5
South-facing Lower Convex Slope	16	0	0.19	0.14	0.54	0	0	0	0	2
South-facing Lower Concave Slope	31	0	0.00	0.00	0.00	0	0	0	0	0

IV. Bare Soil

Bare Soil	N	N*	Mean	SE Mean	St Dev	Q1	Med	Q3	Min	Max
Floodplain	20	0	20.20	3.52	15.72	11.3	15	30	2	65
North-facing Lower Concave Slope	26	0	20.00	1.88	9.59	13.8	20	26.3	5	40
North-facing Lower Convext Slope	19	0	28.42	2.10	9.14	20	30	35	10	45
North-facing Upper Concave Slope	23	0	30.48	2.33	11.16	25	35	40	2	45
North-facing Upper Convex Slope	36	0	32.64	2.06	12.33	25	35	40	5	50
Ridge top	56	0	40.63	1.73	12.97	30	40	50	0	70
South-facing Upper Convex Slope	33	0	33.64	1.93	11.06	27.5	30	40	10	60
South-facing Upper Concave Slope	18	0	25.83	3.58	15.17	13.8	25	36.3	5	50
South-facing Lower Convex Slope	16	0	20.13	2.16	8.66	15	20	25	2	35
South-facing Lower Concave Slope	31	0	22.32	1.98	11.04	15	20	30	2	45

V. Total Forbs

Total Forbs	N	N*	Mean	SE Mean	St Dev	Q1	Med	Q3	Min	Max
Floodplain	20	0.00	37.25	4.27	19.09	15	42.5	50	5	60
North-facing Lower Concave Slope	26	0.00	32.12	2.06	10.50	28.8	30	40	5	50
North-facing Lower Convext Slope	19	0.00	30.79	2.40	10.44	25	30	40	15	50
North-facing Upper Concave Slope	23	0.00	28.26	1.82	8.74	25	25	30	15	55
North-facing Upper Convex Slope	36	0.00	27.78	1.62	9.74	20	27.5	35	10	50
Ridge top	56	0.00	22.68	1.22	9.14	15	25	30	0	40
South-facing Upper Convex Slope	33	0.00	32.42	1.94	11.12	25	35	40	10	50
South-facing Upper Concave Slope	18	0.00	37.22	3.16	13.42	30	35	45	10	65
South-facing Lower Convex Slope	16	0.00	37.81	4.42	17.70	22.5	37.5	48.8	10	75
South-facing Lower Concave Slope	31	0.00	39.84	3.09	17.20	25	40	50	10	70

Table 5.19 Mann-Whitney test of relative cover of individual perennial bunchgrass species, combined non-native annual grass species, combined forb species, and bare ground, across landscape positions (2004 field data). Perennial Bunchgrass Plant Community Study, Centennial Specific Plan Project Site, Los Angeles County, California. [Bold = significant difference at 0.05 confidence level]

Acnatherum speciosum

	FP	NFLCC	NFLCV	NFUCC	NFUCV	RT	SFUCV	SFUCC	SFLCV	SFLCC
FP		0.875	0.504	0.619	0.185	0.143	0.739	0.970	0.904	0.774
NFLCC			0.366	0.470	0.105	0.075	0.884	0.817	0.752	0.920
NFLCV				0.901	0.497	0.439	0.259	0.563	0.633	0.285
NFUCC					0.374	0.304	0.348	0.684	0.757	0.378
NFUCV						0.957	0.056	0.226	0.277	0.066
RT							0.036	0.179	0.226	**0.044**
SFUCV								0.682	0.619	0.982
SFUCC									0.966	0.717
SFLCV										0.653
SFLCC										

Elymus multisetus

	FP	NFLCC	NFLCV	NFUCC	NFUCV	RT	SFUCV	SFUCC	SFLCV	SFLCC
FP		0.482	**0.0032**	**0.0008**	**0.0002**	**0.044**	0.891	0.970	0.180	0.752
NFLCC			**0.0052**	**0.0008**	**0.0001**	0.103	0.487	0.550	0.419	0.225
NFLCV				0.516	0.461	0.086	**0.0005**	**0.0054**	0.122	**0.0001**
NFUCC					0.877	**0.0127**	**0.0001**	**0.0015**	**0.0398**	**0.0000**
NFUCV						**0.0020**	**0.0000**	**0.0004**	**0.0232**	**0.0000**
RT							**0.0170**	0.062	0.599	**0.0063**
SFUCV								0.962	0.168	0.595
SFUCC									0.218	0.694
SFLCV										0.067
SFLCC										

Nasella cernua

	FP	NFLCC	NFLCV	NFUCC	NFUCV	RT	SFUCV	SFUCC	SFLCV	SFLCC
FP		0.0179	**0.0061**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0001**	**0.0002**
NFLCC			0.459	**0.0050**	**0.0001**	**0.0000**	**0.0000**	**0.0001**	**0.0196**	**0.0378**
NFLCV				0.106	**0.0084**	**0.0000**	**0.0000**	**0.0035**	0.128	0.273
NFUCC					0.173	**0.0000**	**0.0000**	**0.0434**	0.988	0.627
NFUCV						**0.0000**	**0.0000**	0.220	0.428	0.926
RT							0.519	**0.0000**	**0.0001**	**0.0000**
SFUCV								**0.0003**	**0.0006**	**0.0000**
SFUCC									0.249	**0.025**
SFLCV										0.509
SFLCC										

Poa secunda ssp. secunda

	FP	NFLCC	NFLCV	NFUCC	NFUCV	RT	SFUCV	SFUCC	SFLCV	SFLCC
FP		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	0.687	0.890	0.131	0.122
NFLCC			0.954	0.248	0.091	**0.0439**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
NFLCV				0.223	0.095	**0.0274**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
NFUCC					0.662	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
	FP	NFLCC	NFLCV	NFUCC	NFUCV	RT	SFUCV	SFUCC	SFLCV	SFLCC
NFUCV						**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
RT							**0.0000**	**0.0000**	**0.0000**	**0.0000**
SFUCV								**0.0446**	**0.0016**	**0.0001**
SFUCC									0.171	0.173
SFLCV										0.758
SFLCC										

Combined Non-Native Annual Grasses

	FP	NFLCC	NFLCV	NFUCC	NFUCV	RT	SFUCV	SFUCC	SFLCV	SFLCC
FP		0.253	0.188	**0.003**	**0.0000**	**0.0000**	**0.0007**	0.464	0.911	1.000
NFLCC			0.163	**0.0022**	**0.0000**	**0.0000**	**0.0195**	0.667	0.2559	0.114

NFLCV			0.196	**0.0437**	**0.0006**	0.675	0.103	**0.0337**	**0.0071**
NFUCC				0.760	**0.0126**	0.113	**0.0024**	**0.0016**	**0.0000**
NFUCV					**0.031**	**0.0113**	**0.0001**	**0.0001**	**0.0000**
RT						**0.0000**	**0.0000**	**0.0000**	**0.0000**
SFUCV							**0.0117**	**0.0044**	**0.0000**
SFUCC								0.490	0.480
SFLCV									0.955
SFLCC									

Combined Forb Species

	FP	NFLCC	NFLCV	NFUCC	NFUCV	RT	SFUCV	SFUCC	SFLCV	SFLCC
FP		0.102	0.140	0.062	**0.248**	**0.0018**	0.120	0.546	0.797	0.831
NFLCC			0.498	0.058	0.071	**0.0002**	0.859	0.230	0.306	0.059
NFLCV				0.388	0.366	**0.0089**	0.526	0.111	0.217	0.059
NFUCC					0.969	**0.0480**	0.092	**0.0081**	0.067	**0.0107**
NFUCV						**0.0266**	0.062	**0.0082**	**0.0432**	**0.0023**
RT							**0.0001**	**0.0000**	**0.0011**	**0.0000**
SFUCV								0.283	0.318	0.067
SFUCC									0.958	0.492
SFLCV										0.628
SFLCC										

Bareground

	FP	NFLCC	NFLCV	NFUCC	NFUCV	RT	SFUCV	SFUCC	SFLCV	SFLCC
FP		0.459	**0.0083**	**0.0038**	**0.009**	**0.0000**	**0.0002**	0.157	0.518	0.219
NFLCC			**0.0071**	**0.0006**	**0.0001**	**0.0000**	**0.0000**	0.227	0.958	0.445
NFLCV				0.305	0.150	**0.0002**	0.117	0.462	**0.0137**	**0.0458**
NFUCC					0.485	**0.0019**	0.566	0.213	**0.0018**	**0.0053**
NFUCV						**0.0085**	0.961	0.089	**0.0008**	**0.0010**
RT							**0.0078**	**0.0006**	**0.0000**	**0.0000**
SFUCV								**0.0479**	**0.0001**	**0.0002**
SFUCC									0.304	0.490
SFLCV										0.525
SFLCC										

Table 5.20 Descriptive statistics for soil pH, cation exchange capacity (CEC), and percent organic matter by landscape position (spring 2004 field data). Perennial Bunchgrass Plant Community Study, Centennial Specific Plan Project, Los Angeles County, California.

Soil pH	N	N*	Mean	SE Mean	StDev	Q1	Med	Q3	Min	Max
Floodplains	5	0	7.42	0.11	0.25	7.20	7.40	7.65	7.20	7.80
North-facing Lower Concave Slopes	6	0	7.57	0.09	0.23	7.35	7.65	7.73	7.20	7.80
North-facing Lower Convex Slopes	3	0	7.57	0.09	0.15	7.40	7.60	7.70	7.40	7.70
North-facing Upper Concave Slopes	4	0	7.48	0.11	0.22	7.25	7.50	7.68	7.20	7.70
North-facing Upper Convex Slopes	5	0	7.48	0.12	0.28	7.20	7.60	7.70	7.10	7.80
Ridge tops	5	0	7.62	0.10	0.23	7.40	7.60	7.85	7.40	7.90
South-facing Upper Convex Slopes	5	0	7.48	0.12	0.28	7.20	7.60	7.70	7.10	7.80
South-facing Upper Concave Slopes	5	0	7.46	0.09	0.19	7.30	7.40	7.65	7.20	7.70
South-facing Lower Convex Slopes	3	0	7.50	0.06	0.10	7.40	7.50	7.60	7.40	7.60
South-facing Lower Concave Slopes	5	0	7.60	0.08	0.19	7.40	7.70	7.75	7.40	7.80

Soil CEC	N	N*	Mean	SE Mean	StDev	Q1	Med	Q3	Min	Max
Floodplains	5	0	9.72	0.77	1.71	8.30	8.90	11.55	8.00	11.80
North-facing Lower Concave Slopes	6	0	9.78	1.04	2.54	7.90	9.05	11.80	7.30	14.20
North-facing Lower Convex Slopes	3	0	8.97	1.31	2.27	6.90	8.60	11.40	6.90	11.40
North-facing Upper Concave Slopes	4	0	5.55	0.76	1.53	4.13	5.55	6.98	4.00	7.10
North-facing Upper Convex Slopes	5	0	7.44	0.21	0.47	7.05	7.50	7.80	6.70	8.00
Ridge tops	5	0	10.44	0.96	2.15	8.60	10.40	12.30	7.40	13.30
South-facing Upper Convex Slopes	5	0	7.62	1.05	2.35	5.55	7.70	9.65	4.30	10.70
South-facing Upper Concave Slopes	5	0	8.16	0.91	2.03	6.55	7.80	9.95	6.00	11.40
South-facing Lower Convex Slopes	3	0	8.87	1.22	2.11	7.10	8.30	11.20	7.10	11.20
South-facing Lower Concave Slopes	5	0	9.64	0.61	1.37	8.65	9.40	10.75	8.20	11.90

Soil Percent Organic Matter	N	N*	Mean	SE Mean	StDev	Q1	Med	Q3	Min	Max
Floodplains	5	0	2.90	0.76	1.71	1.60	2.40	4.45	1.40	5.70
North-facing Lower Concave Slopes	6	0	2.58	0.32	0.79	1.78	2.80	3.20	1.40	3.50
North-facing Lower Convex Slopes	3	0	2.77	0.12	0.21	2.60	2.70	3.00	2.60	3.00
North-facing Upper Concave Slopes	4	0	1.90	0.17	0.34	1.70	1.75	2.25	1.70	2.40
North-facing Upper Convex Slopes	5	0	1.98	0.29	0.65	1.35	2.10	2.55	1.00	2.60
Ridge tops	5	0	2.12	0.18	0.41	1.70	2.20	2.50	1.70	2.60
South-facing Upper Convex Slopes	5	0	2.14	0.29	0.66	1.75	1.90	2.65	1.70	3.30
South-facing Upper Concave Slopes	5	0	2.54	0.38	0.85	1.75	2.40	3.40	1.50	3.50
South-facing Lower Convex Slopes	3	0	2.30	0.21	0.36	2.00	2.20	2.70	2.00	2.70
South-facing Lower Concave Slopes	5	0	2.22	0.19	0.41	1.85	2.20	2.60	1.70	2.80

Response to Comment Letter ADD-F.16
California Native Plant Society
August 17, 2018

Response to Comment ADD-F.16-1:

Thank you for your participation in this public process. These comments are noted and will be provided to the Regional Planning Commission and Board of Supervisors for consideration. This introductory comment does not specifically address the Project or the adequacy of the EIR and no further response is required.

Response to Comment ADD-F.16-2:

The Commenter's opinion is noted. As noted by the Commenter, signatories to the 2008 Tejon Ranch Conservation and Land Use Agreement ("Ranch-Wide Agreement" or "RWA") agreed not to oppose four Tejon Ranch development projects, including the Centennial Project, after years of cooperative study and identification of the most appropriate respective locations for preservation and development. Per RWA recitals, "[t]he long-term conservation of Tejon Ranch has been one of the highest priorities" of the signatory organizations, and the agreement "follows many years of scientific analysis of conservation values on Tejon Ranch by Tejon Ranch Company (TRC) and others, including the Resource Organizations. By comprehensively addressing the entire Tejon Ranch, this Agreement avoids fragmentation of many of the environmentally sensitive areas of Tejon Ranch. The conserved lands will be managed in accordance with a comprehensive Ranch-wide Management Plan that will identify the natural resources and conservation values of the conserved lands as well as opportunities to protect, enhance and restore identified resources and values and establish best management practices for continued use of the conserved lands for existing ranch uses." (Final EIR, Appendix 4.7-E, page 2)

Response to Comment ADD-F.16-3:

The size of the Project's proposed Mitigation Preserve was substantially increased following publication of the Draft EIR. As previously explained in response to Comment B.4-63, and as depicted on Final EIR Exhibit 5.7-10, following publication of the Draft EIR, the Project's Off-Site Mitigation Preserve was significantly expanded to add the approximately 16,668-acre "Area 7," which includes approximately 7,877 acres of additional preserved grassland located within the contiguous open space areas of Tejon Ranch.

As this comment notes, and as previously explained in response to Comment B.4-63, portions of the Off-Site Mitigation Preserve are currently subject to conservation easements. Specifically, all or portions of Areas 3, 4, and 5 are subject to conservation easements acquired by the Wildlife Conservation Board (the "WCB Easements"). In addition, as discussed in EIR, portions of Area 7 and Area 1 are subject to two conservation easements totaling approximately 9,765 acres that were granted by the Tejon Ranch Company to the Tejon Ranch Conservancy, as recorded in the Official Records of Kern County as Document

Numbers 214047995 and 214064244 (collectively, for purposes of this response, the "Conservancy Easements").

To the extent this comment suggests that the entire Conservancy Easements area will be used to accommodate the anticipated realignment of the Pacific Crest Trail, the comment is in error. Per the terms of the Conservancy Easements, the easement area must be managed by the Tejon Ranch Conservancy in accordance with the Ranch-wide Management Plan and in a manner consistent with the Conservancy Easements' conservation purpose. However, the Conservancy Easements expressly reserve Tejon Ranch Company's right to grant to the U.S. Forest Service a linear trail easement within the Conservancy Easements area in order to accommodate future realignment of the Pacific Coast Trail. Such trail easement has not yet been granted, though it is anticipated to occur on some future date, as discussed in response to Comment F.4-2.

The County cannot confirm the accuracy of the "GIS exercise" that commenter undertook to prepare the table and maps included in this comment. However, the location of the WCB Easements and Conservancy Easements shown on this comment's various maps appear roughly accurate.

Response to Comment ADD-F.16-4:

To the extent this comment suggests that those portions the Off-Site Mitigation Preserve that are subject to the WCB Easements and Conservancy Easements cannot be used to mitigate Project impacts on biological resources, this comment is in error. Under the Ranch-Wide Agreement, Tejon Ranch lands that cannot be developed based on the private party agreement between Tejon Ranch and the environmental signatories (Sierra Club, Natural Resources Defense County, Audubon Society, Planning and Conservation League, and Endangered Habitats League) are expressly allowed to be used as mitigation for planned development activities, including Centennial. Thus, the Conservancy Easements expressly reserve to Tejon Ranch Company the right to conduct all activities reasonably required to perform any mitigation requirements imposed pursuant to any Project approval. (See Conservancy Easements Section 6(b)(1)(B).) Moreover, as explained in Response to Comment B.4-63, while off-site mitigation lands subject to the WCB Easements are not eligible for preservation mitigation credit, the WCB Easements expressly provide that the easement areas are eligible mitigation lands for enhancement, restoration, and creation of biological resources (see WCB Easement Sections 6(b)(1)(B) and 1(jj); see also Ranch-Wide Agreement Exhibit R, P.2 Bullet 3). These lands are included in the Off-Site Mitigation Preserve because they contain certain biological resources of an equal or greater biological value than those found on the Project site, as detailed in the Mitigation Preserve Review included as Draft EIR Appendix 5.7-C.

With respect to this comment's questions regarding the details of specific enhancement, restoration or creation mitigation that may occur within the Off-Site Mitigation Preserve, as a general matter, mitigation plans are not required to be circulated with the EIR so long as the mitigation measure identifies the criteria the lead agency will apply in determining that the impact will be mitigated. This type of mitigation approach is consistent with CEQA, which

permits the formulation of detailed plans at a future date as long as the mitigation measure includes specified performance standards and identifies a range of feasible measures that may be implemented to achieve the performance standard and meet mitigation commitments.[3363] Please see response to Comment F.8-173, which sets forth a table that summarizes the applicable performance standards, and feasible measures for meeting such standards, for each of the referenced Project mitigation plans. The more detailed text in some of these mitigation measures also remains applicable to the Project. Note that there is no separate "plan" proposed for the biological resources mitigation program as a whole, which consists of all biological resource mitigation measures. Implementation of these biological resource mitigation measures described in response to Comment F.8-173, as well as other mitigation measures, is included in the County's Mitigation Monitoring and Reporting Program (MMRP).

Response to Comment ADD-F.16-5:

The Commenter questions whether WCB is aware that enhancement, restoration or creation mitigation activities may occur within the WCB Easement areas. As discussed in response to Comment ADD-F.16-4, the WCB Easements expressly provide that the easement areas are eligible mitigation lands for enhancement, restoration, and creation of biological resources.

Response to Comment ADD-F.16-6:

Following discussion with the California Department of Fish and Wildlife, the Applicant proposed to add Area 7 to the Off-Site Mitigation Preserve in order ensure that a 2:1 grasslands preservation ratio can be met on those areas of the Mitigation Preserve that are not subject to WCB Easements. Please see response to Comment B.4-63 for additional discussion of this topic. Please see response to Comment ADD-F.16-3 regarding the accuracy of the map referenced in this comment.

Response to Comment ADD-F.16-7:

The Commenter refers to a Project grassland and wildflower study prepared by Vollmar Consulting (Vollmar Consulting 2004). The study is discussed in the Draft EIR on pages 5.7-25, 5.7-26, 5.7-27, 5.7-29, 5.7-40, 5.7-42, 5.7-43, and 5.7-45 and is referred to throughout Section 5.7 as source for plant and grassland information. Additional discussion of the Vollmar Consulting study is provided in Final EIR responses to Comments F.8-118, F.8-119, F.8-120, and F.8-123, and response to Exhibit B of Comment Letter F.8.

Response to Comment ADD-F.16-8:

While the Commenter's anecdotal botanical information about the site and Mitigation Preserve is noted, an extensive regional grassland study comparing the grasslands on the Project site to the Mitigation Preserve was conducted (NRC 2007). Mitigation Areas 6 and 7 were included in this study with a concentration of sampling plots occurring in the eastern end of the northern slopes of the Tehachapi Mountains, around Area 6. Relative native cover and species richness for all grassland plots in these areas were documented to be high (NRC

[3363] CEQA Guidelines § 15126.4(a)(1)(B)

2007). The Commenter notes that they noticed *Stipa speciosa* becomes more dominant as you move eastward through Area 7 and in Area 6; however, as shown on Table 3 of the NRC study, of the ten "most important" species throughout the study region, *Stipa speciosa* is not listed. Furthermore, *Stipa speciosa* is found on the Project site and, therefore, is an appropriate species to include for preservation.

In regard to the dominant bunchgrass species found in the grassland components of the northern mitigation area (including Areas 6 and 7) and the Project site, the NRC study found that the relative frequency (%) of the two most important bunchgrass species *Stipa pulchra* and *Poa secunda*, are as follows: 3.65% for *Stipa pulchra* on the Project site versus 3.79% in the northern mitigation preserve (includes all mitigation areas north of the Project site) and 2.42% for *Poa secunda* on the Project site versus 3.03% in the northern mitigation preserve. The results of the study indicate similar abundance of important grasslands species.

In addition, the Commenter notes the presence of Joshua trees in the eastern portion of Area 7 and in Area 6 as being an indicator of desert influence on the ecology. Although Joshua trees are technically an indicator species for the Mojave Desert, the presence of Joshua trees in the foothills of the Tehachapi Mountains does not mean the ecology is so dissimilar from the Project site that the grassland found in these areas cannot be preserved as mitigation for the site. Two extant populations of Joshua tree occur approximately three miles *southwest* of the Project site, and scattered historical records occur east of 300th street, the closest to the Project site being approximately 3.3 miles away in Neenach, CA (CCH 2018).[3364] Also see response to Comment ADD-F.16-8 above.

Response to Comment ADD-F.16-9:

The Commenter states a personal hypothesis that microclimate patterns occurring on either side of Big Sycamore Canyon results in differing precipitation rates. Regarding a difference in species composition, please see response to Comment ADD-F.16-8 above. Furthermore, microclimate patterns are contingent upon a suite of factors unique to any one location. Areas within the Project site itself would be expected to differ. For example, a north facing slope in upper Aliso Canyon may have a very different microclimate than a southern facing slope or flatland occurring west of the California Aqueduct. There are patches of xeric (very dry) vegetation communities on the site northwest of Quail Lake that support different types of plant species not seen on the remainder of the site. Similarly, the woodland composition on the site shifts from dominated by valley oaks in some areas to dominated by blue oak in other areas. The many grassland studies conducted on the Project site also attest to this variability. However, as described in response to Comment ADD-F.16-8, grassland studies looking at the site and the mitigation lands found that the dominant species of the grasslands on the site are represented in a similar frequency in the Mitigation Preserve inclusive of Area 6 and the eastern portion of Area 7. As such, current available information is appropriate and adequate to support the use of Areas 6 and 7 for grassland mitigation.

[3364] Consortium of California Herbaria (CCH). 2018. Consortium of California Herbaria. Data provided by the participants of the Consortium of California Herbaria for yucca brevifolia. Berkeley, CA: University of California. http://ucjeps.berkeley.edu/consortium/.

Response to Comment ADD-F.16-10:

This comment summarizes all of the comments included in this comment letter. Please see responses to Comments F.16-1 through F.16-9. The County disagrees with this comment's suggestion that Areas 6 and 7 were inappropriately included in the Off-Site Mitigation Preserve for the reasons discussed in responses to Comments F.16-7 through F.16-10. Regarding the quality of the grasslands present on the Project site, please see Draft EIR pages 5.7-42 through 5.7-47. The Commenter's opinion of the Off-Site Mitigation Preserve design is noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration.

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August 17, 2018

Los Angeles County Regional Planning Commission
Department of Regional Planning
320 West Temple Street
Los Angeles, CA 90012
(213) 974-6411
Submitted via email to: rruiz@planning.lacounty.gov and
sackett@planning.lacounty.gov

Memo re Tejon Ranch Company's Press Release Dated August 7, 2018

Dear Los Angeles County Regional Planning Commission,

I am submitting the attached Tejon Ranch Company (TRC) Press Release from August 7, 2018 (Attachment1_TRCmemo_7Aug18) titled Tejon Ranch Co. Reports Second Quarter and Year-to-Date 2018 Results of Operation for your consideration.

In the press release, TRC details a $0.6 million loss from the TRC/Rock Outlet Center. The TRC/Rock Outlet Center is located at the base of the Grapevine on TRC land in Kern County approximately 23 miles to the north of the Centennial Specific Plan Area. The press release says that this loss is the result of "accelerating amortization of lease intangibles driven by the removal of poor performing tenants. The Company is actively seeking replacement tenants."

We contend that this press release is relevant to the pending RPC decision on the Centennial Specific Plan for two reasons:

1. TRC continues to state that its Centennial Specific Plan will be a mixed-use development including retail and commercial businesses. If TRC is having difficulties keeping its outlet mall occupied and running at a profit how can they contend that there will be future market demand for similar economic opportunities on the nearby Centennial site?

2. The lack of economic stability at the TRC/Rock Outlet Center comes at a time when the United States has experienced an unprecedented 10 years of unabated economic growth (see https://www.bea.gov/news/glance, and many other recent news stories). How does TRC expect there to be a demand for Centennial's commercial/retail development if the Outlet Center cannot even turn a profit on the heel of 10 years of economic growth? What will happen to the market demand for TRC's residential, retail, and commercial developments when the inevitable economic downturn happens?

ADD-F.17-1

TRC's press release from August 7, points to a fact relevant to Centennial: that there simply may not be a market for this type of development in the far northwestern corner of Los Angeles County.

ADD-F.17-1 cont.

Sincerely,

Nicholas Jensen, PhD
Southern California Conservation Analyst
California Native Plant Society
1500 North College Ave
Claremont, CA 91711
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Press Release

Tejon Ranch Co. Reports Second Quarter and Year-to-Date 2018 Results of Operations

TEJON RANCH, Calif.–(BUSINESS WIRE)–Aug. 7, 2018-- Tejon Ranch Co., or the Company, (NYSE:TRC), a diversified real estate development and agribusiness company, today announced financial results for the three- and six-months ended June 30, 2018.

The Company is in the process of entitling, planning and developing four master planned developments. Three of the developments are mixed-use residential communities and the fourth is a large commercial/industrial center currently under development. When all entitlements are approved, the Company's current and future master planned developments will be home to just under 35,000 housing units and more than 35 million square feet of commercial/industrial space. To date, 15,450 housing units, 750 lodging units and 25.3 million square feet of commercial space have received various levels of approval.

"Despite a few headwinds that affected second-quarter results, Tejon Ranch has a solid financial foundation as we proceed through the development process to unlock asset value in a strategically located, growing region," said Gregory S. Bielli, President and CEO. "We are aggressively moving forward with plans to develop mixed-use residential communities that are tailored to support housing needs and economic development, while at the same time embracing sustainability and conservation. In addition, we continue to execute our development plans within the Tejon Ranch Commerce Center."

Second Quarter Financial Results

Net loss attributable to common stockholders for the second quarter of 2018 was $1.0 million, or a loss per common share of $0.04, compared with a net loss of $0.2 million, or a loss per common share of $0.01, for the second quarter of 2017.

Revenues and other income, including equity in earnings of unconsolidated joint ventures, for the second quarter of 2018 were $6.1 million, a decrease of $1.2 million, or 16%, compared with $7.3 million for the same period in 2017. Factors behind the decrease include:

- Farming revenues decreased approximately $1.0 million as a result of:
  - Almond revenues decreased $0.5 million resulting from the timing of carryover crop sales. The Company sold 86,000 and 177,000 pounds during the quarters ended June 30, 2018 and 2017, respectively
  - Pistachio revenues decreased $0.3 million, resulting from depressed crop yields for the 2017 pistachio crop. The Company sold 38,000 and 148,000 pounds for the quarters ended June 30, 2018 and 2017, respectively.
- Equity in earnings from our unconsolidated joint ventures decreased $0.9 million to $0.7 million as a result of:
  - Our share of the operating results from TA/Petro decreased $0.6 million due to lower fuel margins driven by higher fuel costs that were not offset by a 15% increase in fuel revenues.
  - Our share of the operating results from TRCC/Rock Outlet Center decreased $0.6 million mostly related to accelerating amortization of lease intangibles driven by the removal of poor performing tenants. The Company is actively seeking replacement tenants.
  - The Company saw improvements of $0.4 million from our TRC-MRC 2 joint venture stemming from the absence of non-cash GAAP losses that were prevalent during the prior year.

Year-to-Date Financial Results

Net income attributable to common stockholders for the first six months of 2018 was $0.5 million, or earnings per diluted common share of $0.02, compared with a net loss of $2.1 million, or a loss per common share of $0.10, for the first six months of 2017.

Revenues and other income, including equity in earnings of unconsolidated joint ventures, for the six months of 2018 were $20.0 million, an increase of $6.6 million, or 49%, compared with $13.4 million for the first six months in 2017. Factors behind

ADD-F.17-1 cont.

this increase include:

Moderate drought conditions in Kern County increased water sales opportunities. The Company sold 7,442 acre-feet of water during the first six months of 2018, generating $8.0 million in revenue. Water sales during the six months ended of 2017 totaled 939 acre-feet, generating $1.2 million.

Our share of the operating results from the Company's unconsolidated joint ventures decreased approximately $1.0 million for the same reasons discussed for the quarter end results.

2018 Operational Highlights

In January, the Company obtained approval from Kern County on the first phase of the Farm Village which will serve as the "front door" to Mountain Village. Farm Village will include fresh culinary offerings, artisan markets, boutique lodging, and an array of trails, gardens, and agriculture that will be intertwined to create a unique and relaxing experience while fulfilling the needs of residents of Mountain Village.

During 2018, approval for expansion of the Foreign Trade Zone (FTZ) was granted by the U.S. Department of Commerce. The expanded FTZ now covers all the industrial sites within TRCC, an area totaling 1,094 acres. The FTZ designation allows the user to secure the many benefits and cost reductions associated with streamlined movement of goods in and out of the zone. This FTZ designation is further supplemented by the Economic Development Incentive Policy, or EDIP adopted by the Kern County Board of Supervisors. EDIP is aimed to expand and enhance the County's competitiveness by taking affirmative steps to attract new businesses and to encourage the growth and resilience of existing businesses. The EDIP provides incentives such as tax breaks, building supporting infrastructure, or workforce development.

In March, the Company successfully leased half of a 480,000-square-foot industrial building to Dollar General. The building was constructed in 2017 through a joint venture formed with Majestic Realty Co. The joint venture is currently in negotiations with a prospective tenant for the remaining space.

2018 Outlook:

The Company's capital structure provides a solid foundation for continued investment in ongoing and future projects. As of June 30, 2018, total capital, including debt, was approximately $497.5 million. The Company has cash and securities totaling approximately $80.6 million and $30.0 million available on its line of credit.

The Company will continue to aggressively pursue development, leasing, and investment within Tejon Ranch Commerce Center (TRCC) and in its joint ventures. The Company will also continue to invest in its residential projects, including Mountain Village at Tejon Ranch, advancing the entitlement of Centennial at Tejon Ranch and defending litigation for Grapevine at Tejon Ranch.

During 2018, the Company will continue to invest funds in master project infrastructure, as well as vertical development within its active commercial and industrial development. California is one of the most highly regulated states in which to engage in real estate development and, as such, natural delays, including those resulting from litigation, can be reasonably anticipated. Accordingly, throughout the next few years, the Company expects net income to fluctuate from year-to-year based on commodity prices, production within its farming segment, and the timing of sales of land and the leasing of land within its industrial developments.

The Company believes the variability of its quarterly and annual operating results will continue during 2018 due to the nature of its current farming and real estate activities. It is currently too premature to predict what our crop production will be as it is too early in the growing cycle. The Company is also unable to predict the outcome of ongoing trade discussions with foreign nations nor is the Company able to predict the resulting impact over crop demand or pricing. Increased tariffs from China and India, which are major customers of almonds and pistachios, can make American products non-competitive and push customers to switch to another producing country.

About Tejon Ranch Co.

Tejon Ranch Co. (NYSE: TRC) is a diversified real estate development and agribusiness company, whose principal asset is its 270,000-acre land holding located approximately 60 miles north of Los Angeles and 30 miles south of Bakersfield.

ADD-F.17-1 cont.

More information about Tejon Ranch Co. can be found on our website at (http://cts.businesswire.com/ct/CT?id=smartlink&url=http%3A%2F%2Fwww.tejonranch.com&esheet=51848943&newsitemid=20180807005309&lan=en-US&anchor=www.tejonranch.com&index=1&md5=e8fecd3192fbbf9acff15635397a09f6)www.tejonranch.com (http://www.tejonranch.com).

To watch a video overview of Tejon Ranch Co., please visit: http://tejonranch.com/investorvideo/ (http://cts.businesswire.com/ct/CT?id=smartlink&url=http%3A%2F%2Ftejonranch.com%2Finvestorvideo%2F&esheet=51848943&newsitemid=20180807005309&lan=en-US&anchor=http%3A%2F%2Ftejonranch.com%2Finvestorvideo%2F&index=2&md5=e6987fd9493605ea57c2b2a118a8c347).

Forward Looking Statements:

The statements contained herein, which are not historical facts, are forward-looking statements based on economic forecasts, strategic plans and other factors, which by their nature involve risk and uncertainties. In particular, among the factors that could cause actual results to differ materially are the following: business conditions and the general economy, future commodity prices and yields, market forces, the ability to obtain various governmental entitlements and permits, interest rates and other risks inherent in real estate and agriculture businesses. For further information on factors that could affect the Company, the reader should refer to the Company's filings with the Securities and Exchange Commission.

TEJON RANCH CO.
CONSOLIDATED STATEMENTS OF OPERATIONS
(In thousands, except earnings per share)
(Unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
Revenues:				
Real estate - commercial/industrial	$ 2,189	$ 2,083	$ 4,343	$ 4,272
Mineral resources	1,500	1,519	10,631	3,520
Farming	542	1,501	1,737	1,932
Ranch operations	839	860	1,828	1,941
Total revenues from Operations	5,070	5,963	18,539	11,665
Operating Profits:				
Real estate - commercial/industrial	801	181	1,636	627
Real estate - resort/residential	(433)	(500)	(848)	(1,130)
Mineral resources	905	990	5,805	1,667
Farming	(649)	243	(1,292)	(649)
Ranch operations	(509)	(601)	(909)	(1,013)
Income (loss) from Operating Segments	115	313	4,392	(498)
Investment income	346	95	629	198
Other loss, net	(10)	(275)	(24)	(289)
Corporate expense	(2,464)	(2,368)	(5,196)	(5,119)
Loss from operations before equity in earnings of unconsolidated joint ventures	(2,013)	(2,235)	(199)	(5,708)
Equity in earnings of unconsolidated joint ventures, net	652	1,560	819	1,788
(Loss) income before income tax expense	(1,361)	(675)	620	(3,920)
Income tax (benefit) expense	(348)	(472)	178	(1,804)
Net (loss) income	(1,013)	(203)	442	(2,116)
Net loss attributable to non-controlling interest	(16)	(27)	(18)	(38)
Net (loss) income attributable to common stockholders	$ (997)	$ (176)	$ 460	$ (2,078)
Net (loss) income per share attributable to common stockholders, basic	$ (0.04)	$ (0.01)	$ 0.02	$ (0.10)
Net (loss) income per share attributable to common stockholders, diluted	$ (0.04)	$ (0.01)	$ 0.02	$ (0.10)
Weighted average number of shares outstanding:				
Common stock	25,950,851	20,855,112	25,931,940	20,841,627
Common stock equivalents	19,748	22,837	29,198	44,003
Diluted shares outstanding	25,970,599	20,877,949	25,961,138	20,885,630

Non-GAAP Financial Measure

ADD-F.17-1 cont.

This news release includes references to the Company's non-GAAP financial measure "EBITDA." EBITDA represents our share of consolidated net income in accordance with GAAP, before interest, taxes, depreciation, and amortization, plus the allocable portion of EBITDA of unconsolidated joint ventures accounted for under the equity method of accounting based upon economic ownership interest, and all determined on a consistent basis in accordance with GAAP. EBITDA is a non-GAAP financial measure, and is used by us and others as a supplemental measure of performance. We use Adjusted EBITDA to assess the performance of our core operations, for financial and operational decision making, and as a supplemental or additional means of evaluating period-to-period comparisons on a consistent basis. Adjusted EBITDA is calculated as EBITDA, excluding stock compensation expense. We believe Adjusted EBITDA provides investors relevant and useful information because it permits investors to view income from our operations on an unleveraged basis before the effects of taxes, depreciation and amortization, and stock compensation expense. By excluding interest expense and income, EBITDA and Adjusted EBITDA allow investors to measure our performance independent of our capital structure and indebtedness and, therefore, allow for a more meaningful comparison of our performance to that of other companies, both in the real estate industry and in other industries. We believe that excluding charges related to share-based compensation facilitates a comparison of our operations across periods and among other companies without the variances caused by different valuation methodologies, the volatility of the expense (which depends on market forces outside our control), and the assumptions and the variety of award types that a company can use. EBITDA and Adjusted EBITDA have limitations as measures of our performance. EBITDA and Adjusted EBITDA do not reflect our historical cash expenditures or future cash requirements for capital expenditures or contractual commitments. While EBITDA and Adjusted EBITDA are relevant and widely used measures of performance, they do not represent net income or cash flows from operations as defined by GAAP, and they should not be considered as alternatives to those indicators in evaluating performance or liquidity. Further, our computation of EBITDA and Adjusted EBITDA may not be comparable to similar measures reported by other companies.

TEJON RANCH CO.
Non-GAAP Financial Measures
(Unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
Net (loss) income	$ (1,013)	$ (203)	$ 442	$ (2,116)
Net loss attributed to non-controlling interest	(16)	(27)	(18)	(38)
Interest, net:				
Consolidated	(346)	(95)	(629)	(198)
Our share of interest expense from unconsolidated joint ventures	554	428	1,056	832
Total interest, net	208	333	427	634
Income taxes	(348)	(472)	178	(1,804)
Depreciation and amortization:				
Consolidated	1,149	1,132	2,220	2,282
Our share of depreciation and amortization from unconsolidated joint ventures	1,135	1,322	2,053	2,638
Total depreciation and amortization	2,284	2,454	4,273	4,920
EBITDA	1,147	2,139	5,338	1,672
Stock compensation expense	828	883	1,776	1,694
Adjusted EBITDA	$ 1,975	$ 3,022	$ 7,114	$ 3,366

View source version on businesswire.com: https://www.businesswire.com/news/home/20180807005309/en/ (https://www.businesswire.com/news/home/20180807005309/en/)

Source: Tejon Ranch Co.

Tejon Ranch Co.
Allen Lyda, 661-248-3000
Executive Vice President & Chief Financial Officer

ADD-F.17-1 cont.

Response to Comment Letter ADD-F.17
California Native Plant Society
August 17, 2018

Response to Comment ADD-F.17-1:

The Commenter questions the market demand for retail uses at the Centennial project on the basis of a single statement included in an August 7, 2018 press release that summarizes Tejon Ranch Company's (TRC's) second quarter and year-to-date financial results. As an initial matter, the EIR is required to only evaluate the environmental impacts of a project with the project's features as proposed by the lead agency, for example, a project's proposed land uses. See *Environmental Council of Sacramento v. City of Sacramento* (2006) 142 Cal.App.4th 1018, 1036; *Village Laguna of Laguna Beach, Inc. v. Bd. of Supervisors* (1982) 134 Cal.App.3d 1022, 1030. Further, a project's economic and social effects are not treated as effects on the environment and thus need not be evaluated in the EIR. See CEQA Guidelines §15131(a); *Friends of Davis v. City of Davis* (2000) 83 Cal.App.4th 10045, 1019. Since this comment does not concern the adequacy of the EIR, no further response is required.

Nevertheless, as the Commenter correctly notes, the cited press release states that TRC's "share of the operating results from TRC/Rock Outlet Center decreased $0.6 million mostly related to accelerating amortization of lease intangibles driven by the removal of poor performing tenants. The Company is seeking replacement tenants." The press release, however, represents a snapshot of a moment in time and does fully reflect the dynamic nature of the retail real estate market. Indeed, the Project Applicant confirms that, following publication of the press release, Kate Spade opened a new retail outlet at TRC/Rock Outlet Center, and that retailer Bath & Body Works will open a new retail outlet at TRC/Rock Outlet Center in Fall 2018.[3365] Thus, the single press release statement cited by the Commenter is not evidence that TRC/Rock Outlet Center represents a "lack of economic stability," "cannot even turn a profit," or cannot attract retail tenants, as this comment inaccurately claims. In fact, the full press release itself demonstrates that, for the six months ending on June 20, 2018, TRC realized an approximately $1.6 million operating profit from commercial/industrial real estate, which exceeded profits for the same six-month period in 2017 by approximately 62 percent.

As this comment points out, a regional economic downturn may happen in the future. The economy is cyclical and will likely experience periods of expansion and contraction during the life of the Project. However, in the Los Angeles County region, as of fourth quarter 2017, the vacancy rate for retail space has fallen 1.1 percent since 2013 to 3.7 percent and the average asking rents have increased 25 percent since 2013.[3366] The Commenter provides no evidence that the Project will not benefit from this positive trend in the near term or that it cannot adapt to temporary market contractions that may occur over the course of the

[3365] Keith, N. 2018 (August 24). Personal communication. Telephone correspondence between N. Keith (Tejon Ranch Company) and A. McCoy (Psomas) regarding retail outlets at TRC/Rock Outlet.

[3366] NAI Captial. 2018. Los Angeles Retail Construction Report. NAI Capital. http://www2.naicapital.com/Portals/35/docs/4Q17_LA_Retail_Construction_Report.pdf.

Project's multi-decade life span. In any case, as discussed above, CEQA does not require the EIR to evaluate the Project's potential economic effects.

G. Individuals

CENTENNIAL

at TEJON RANCH

Dear Jodie Sackett,

Scientists warn that we're in the middle of a climate crisis. Because transportation is the single largest driver of carbon pollution in California, new development located far from existing cities has disproportionately large climate impacts. Centennial exemplifies poor, outdated land-use planning on an unprecedented scale. This isolated new city would lock in at least 75,000 new vehicle trips per day with an average trip length of over 45 miles.

If you're committed to a sustainable future for L.A., then you need to say no to Centennial.

L.A.'s wildlands are rapidly diminishing. Ninety-nine percent of California's native grasslands are already gone forever, paved over by similar sprawl development. The Centennial project site contains the last, largest and best native grassland and wildflower fields left in California. Rare wildlife such as California condors, bald eagles, kit foxes and pronghorn also will be harmed if Centennial is built.

It's your job to protect our communities and natural resources, not sell them out to developers.

L.A. County should be setting the standard for 21st-century planning by supporting transit-friendly, urban, affordable housing. Centennial is a poster child of 20th-century sprawl development that exacerbates threats to our population through increasing greenhouse gas production and climate change, air pollution and a deteriorating quality of life.

ADD-G.49-1

The proposed site is in "high" and "very high" fire hazard severity zones. And it's directly on top of California's two major earthquake faults. The area was rated by the U.S. Geological Survey as having the highest level of earthquake hazard.

The county and its taxpayers will be on the hook for millions to provide basic public and emergency services to this remote area.

Instead of allowing isolated sprawl development on irreplaceable grasslands in an area at extremely high risk for fires and earthquakes, L.A. should focus on creating safe housing and economic opportunities in or near existing cities.

Please say no to Centennial: It's the wrong vision for L.A.

Sincerely,

Response to Comment Letter ADD-G.49
Form Letter 6
Various Dates

Response to Comment ADD-G.49-1:

A form letter was prepared by an unknown source and was made available to the public for submittal to the County via email. These form letters appear as Appendix A-6 to this document. The response to this form letter, including as individualized by some commenters, is as follows.

This comment's stated opposition to the Project is noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration. With regard to the topics raised in this letter, please see Final EIR, responses to Comment A.3-3, A.3-4, A.3-5, A.3-7, B.4-20, B.4-21, B.4-22, B.4-23, F.2-2, F.2-5, F.3-29, F.3A-46, F.8-20, F.8- 95, F.8-128 to F.8-131, F.8-189, F.8-204, G.31-1, H.21-1, and J.1-6. Since this comment does not raise any specific concerns regarding the adequacy of the EIR, no further response is required. Please also see response to Comment ADD-G.52-1, for a response to Brian Esquivel's specific comments.

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July 6, 2018

Via Electronic Mail

Los Angeles County Regional Planning Commission
c/o Ms. Rosie O. Ruiz
320 West Temple Street, 13th Floor, Room 1350
Los Angeles, California 90012
rruiz@planning.lacounty.gov

Re: Centennial Project Final Environmental Impact Report

Dear Commissioners:

As a pediatrician and emeritus professor of public health at the University of California, and former top environmental health leader in the United States during my time at CDC, I urge that communities must be designed and built in ways that optimize the health of all. In the past, too many places have been built in ways that put the health and well-being of our communities as an afterthought, the primary focus being RoI --Return on Investment, mere financial return. Too many housing developments are, in essence, "mandatory driving communities", where one third of our citizens are put at an extreme disadvantage—the one third of us who do not drive, in large part because we are too old, too young, too poor, or disabled. ADD-G.50-1

Building far from workplaces and urban areas not only impacts the natural world, building in car-dependent ways generates a *pernicious RoI*: accelerating epidemics of inactivity, pre-diabetes, diabetes, obesity, asthma, isolation and depression. And long commutes erode family time and opportunities to socialize and for healthy recreation. ADD-G.50-2

When I lecture and visit community meetings, I always ask the following question: "What is the most difficult part of your day?" Invariably, the answer is "my commute". To build a community that requires working people to drive more than 30 minutes or more to work each way is abusive to health and to all ages. The proposed Centennial project would consume almost 6,000 acres of irreplaceable habitat and redirect tens of thousands of people to homes more than 30 to 60 miles away from existing ADD-G.50-3

cities. It is a step in the wrong direction—we should be building housing much closer to city centers, places of work, and public transit. Not only would a project like Centennial increase air pollution by putting more cars on already congested roads, it would isolate people as they spend even more time in their cars commuting to jobs, groceries, and recreation far from their homes. Potential residents would have increased stress levels from long car commutes while living in isolation with no time to exercise or spend time with their families or in their communities[1,2].

ADD-G.50-3 cont.

Approving Centennial instead of investing in quality urban growth will have negative public health and economic outcomes. This project would create 75,000 new vehicle trips a day, with an average length of 45 miles per trip. Putting more people in cars on the road is a health and safety hazard. Automobile crashes are the leading cause of death among young people, and they cause more than 3.4 million nonfatal injuries each year, which costs an estimated $200 billion annually.[3] In addition, the US spends 18-19% of its money on medical care – anything we can do to reduce chronic diseases like obesity and asthma would lead to less spending.

ADD-G.50-4

Instead of digging a deeper hole for our health and the environment with projects like Centennial, we can use design strategies that offer the potential to decrease air pollution, protect our water sources, increase physical activity, control injuries, and improve mental health and social capital. Thoughtful urban design is a powerful tool to improve human health while minimizing our impacts on the planet.

ADD-G.50-5

I urge the Commission to reject projects like this. Promote growth that provides healthy lifestyles for everyone. As my colleagues and I said in our book, *Urban Sprawl and Public Health: Designing, Planning, and Building for Healthy Communitie*[3], "At its best, Smart Growth is like a medicine that treats a multitude of diseases – protecting respiratory health, improving cardiovascular health, preventing cancer, avoiding traumatic injuries and fatalities, controlling depression and anxiety, improving well-being." We owe it to our children and our grandchildren to take care of our environment and our health. We must provide them a world that is as healthful, beautiful, and biodiverse as the one we have been given.

ADD-G.50-6

These statements are my own and do not represent University of California policy.

Sincerely,

Richard J. Jackson, MD, MPH, FAAP
Emeritus Professor of Environmental Health Sciences
Former Director, CDC National Center for Environmental Health
Member, National Academy of Medicine (IOM)

---

1 Ewing, R., Schmid, T., Killingsworth, R., Zlot, A., & Raudenbush, S. (2008). Relationship between urban sprawl and physical activity, obesity, and morbidity. In *Urban Ecology* (pp. 567-582). Springer, Boston, MA.

2 Leyden, K. M. (2003). Social capital and the built environment: the importance of walkable neighborhoods. *American journal of public health*, *93*(9), 1546-1551.z

3 Frumkin, H., Frank, L., & Jackson, R. J. (2004). Urban sprawl and public health: Designing, planning, and building for healthy communities. Island Press.

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Building the Evidence—U.S. Approaches

Relationship Between Urban Sprawl and Physical Activity, Obesity, and Morbidity

Reid Ewing, Tom Schmid, Richard Killingsworth, Amy Zlot, Stephen Raudenbush

Abstract

Purpose. *To determine the relationship between urban sprawl, health, and health-related behaviors.*

Design. *Cross-sectional analysis using hierarchical modeling to relate characteristics of individuals and places to levels of physical activity, obesity, body mass index (BMI), hypertension, diabetes, and coronary heart disease.*

Setting. *U.S. counties (448) and metropolitan areas (83).*

Subjects. *Adults ($n = 206,992$) from pooled 1998, 1999, and 2000 Behavioral Risk Factor Surveillance System (BRFSS).*

Measures. *Sprawl indices, derived with principal components analysis from census and other data, served as independent variables. Self-reported behavior and health status from BRFSS served as dependent variables.*

Results. *After controlling for demographic and behavioral covariates, the county sprawl index had small but significant associations with minutes walked ($p = .004$), obesity ($p < .001$), BMI ($p = .005$), and hypertension ($p = .018$). Residents of sprawling counties were likely to walk less during leisure time, weigh more, and have greater prevalence of hypertension than residents of compact counties. At the metropolitan level, sprawl was similarly associated with minutes walked ($p = .04$) but not with the other variables.*

Conclusion. *This ecologic study reveals that urban form could be significantly associated with some forms of physical activity and some health outcomes. More research is needed to refine measures of urban form, improve measures of physical activity, and control for other individual and environmental influences on physical activity, obesity, and related health outcomes. (Am J Health Promot 2003;18[1]:47–57.)*

Key Words: Physical Activity, Urban Design, Sprawl, Obesity, Prevention Research

Reid Ewing completed this work while with the Bloustein School of Planning and Public Policy, Rutgers University, New Brunswick, New Jersey. He is currently with the National Center for Smart Growth, University of Maryland, College Park, Maryland. Tom Schmid is from the Centers for Disease Control and Prevention, NCCDPHP, DNPA, Physical Activity and Health Branch. Richard Killingsworth is with Active Living By Design, University of North Carolina, Chapel Hill, North Carolina. Amy Zlot is with the Centers for Disease Control and Prevention, NCCDPHP, OIIRM, Atlanta, Georgia. Stephen Raudenbush is with the Department of Education, Department of Statistics, and Survey Research Center, University of Michigan, Ann Arbor.

Send reprint requests to Dr. Reid Ewing, University of Maryland, National Center for Smart Growth, Preinkert Field House, College Park, MD 20742; (301)405-6788 (tel).

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INTRODUCTION

The links between physical activity and health outcomes are well established. At the time of the Surgeon General's *Report on Physical Activity and Health* in 1996, hundreds of research studies were amassed providing evidence of these links.[1] Physical inactivity contributes to increased risk of many chronic diseases and conditions, including obesity, hypertension, non–insulin-dependent diabetes, colon cancer, osteoarthritis, osteoporosis, and coronary heart disease. Despite the health benefits of physical activity, 74% of U.S. adults do not get enough physical activity to meet public health recommendations and about one in four U.S. adults remains completely inactive during their leisure time.[2,3]

One consequence of physical inactivity—obesity—has reached epidemic proportions across age, race/ethnic, and socioeconomic groups.[4,5] Recent data from the National Health and Nutrition Examination Survey (NHANES) found that 64.5% of the U.S. adult population is overweight and almost one in three is obese (30.5%).[6] Excess weight and physical inactivity are reported to account for over 300,000 premature deaths each year, second only to tobacco-related deaths among preventable causes of death.[7,8]

There is growing interest in how physical inactivity, obesity, and related chronic health problems are affected by environmental factors. Public health researchers are expanding their horizons, moving beyond individual models of behavior to more inclusive ecologic models that recognize the importance of both physical

and social environments as determinants of health.[9–14] For physical activity researchers, this interest is relatively new. A review published in 1998 found only seven such studies.[14] Since then, several studies have researched environmental determinants of physical activity.[15–19] One such study found that urban and suburban residents living in homes built before 1946 (a proxy for older neighborhoods) were more likely to walk long distances with some frequency than those living in newer homes.[17] This result was attributed to the greater likelihood of sidewalks, denser interconnected streets, and a mix of business and residential uses in older neighborhoods.

Urban planning and transportation researchers are also expanding their horizons, giving increased attention to how their fields affect human behavior and health.[20] In the past decade, more than 50 studies have related aspects of the built environment to travel for utilitarian purposes.[21] Utilitarian travel is travel not for its own sake but, rather, to engage in activities at the trip end, such as going to work, shopping, or school. It is distinct from leisure time physical activity such as walking for exercise, an end in itself. Several recent studies have focused on the relationship between the built environment and the choice of travel mode (e.g., driving a car, taking a bus, or walking).[22–29] Walking for utilitarian purposes is consistently found to be more prevalent in dense, mixed-use neighborhoods when compared to lower density, exclusively residential neighborhoods.[30] For example, a study of two pairs of neighborhoods in the San Francisco Bay Area concluded that walking trips to commercial areas were more frequent in the older neighborhoods with nearby stores and grid-like street networks than in the newer more homogeneous neighborhoods.[29]

The quantity and quality of such studies, although based on cross-sectional and case study designs, are increasing and some of these studies are now being reviewed as part of the evidence base for the *Guide for Community Preventive Services*. Developed by public health experts, this guide will recognize the importance of community design in promoting leisure time physical activity.[31]

The study reported in this paper measured urban form at the county and metropolitan levels. Urban form at these levels is often characterized as more or less "sprawling." *Poor accessibility* is the common denominator of urban sprawl—nothing is within easy walking distance of anything else.[32] Although variously defined by others, we consider sprawl to be any environment characterized by (1) a population widely dispersed in low-density residential development; (2) rigid separation of homes, shops, and workplaces; (3) a lack of distinct, thriving activity centers, such as strong downtowns or suburban town centers; and (4) a network of roads marked by large block size and poor access from one place to another. Compact development is the antithesis of sprawl, keeping complementary uses close to one another.

Our working hypotheses, based on the planning and public health literature, were that residents of sprawling places would (1) walk less, (2) weigh more, and (3) have higher prevalence of health problems linked to physical inactivity than those living in more compact places. These hypotheses were tested using data from the Behavioral Risk Factor Surveillance System (BRFSS) for 1998 to 2000.

METHODS

Design

The research design in this study was cross-sectional and ecologic. The degree of sprawl within counties or metropolitan areas was related to levels of physical activity, obesity, body mass index (BMI), hypertension, diabetes, and coronary heart disease (CHD) for BRFSS respondents from these particular counties or metropolitan areas. Hierarchical linear and nonlinear modeling (HLM) methods were used to control for covariates, such as age, race/ethnicity, and education, at the individual level while examining the effects of sprawl at the population level.

Behavioral and health status variables extracted from BRFSS are listed in Table 1. All data are self-reported. A condition was assumed to exist if a health care practitioner had told the respondent that he or she had the condition.

Three leisure time physical activity variables served as dependent or outcome variables: *any physical activity*, reporting any amount of leisure time physical activity over the past month; *recommended physical activity*, getting the recommended levels of physical activity in the past month; and *minutes walked*, total minutes of walking as leisure time physical activity in the past month. A person was considered to have met the physical activity recommendations if she or he reported ≥30 minutes of moderate-level physical activity on ≥5 days of the week or if he or she reported ≥20 minutes of vigorous activity on ≥3 days of the week. Walking was emphasized because of its documented relationship to urban form and its dominance as a leisure time activity (reported with almost six times the frequency of the next most common leisure time activity, gardening).

Two weight-related measures were included as outcome variables: *BMI* and *obesity*. BMI was defined as weight in kilograms divided by height in meters squared (kg/m^2) and obesity was defined as a BMI of ≥30.0.

Three health status variables were also modeled: *hypertension*, *diabetes*, and *coronary heart disease* (CHD). These three were selected for their known relationships to inactivity and obesity.

Unless otherwise noted, gender, race/ethnicity, education, age, smoking status, and fruit and vegetable consumption were included in models as individual-level covariates. The reference groups for sociodemographic variables were females, white non-Hispanics, college graduates, and persons aged 18 to 30 years. Race/ethnicity, for example, was represented by three dummy variables (1 if yes, 0 otherwise): black non-Hispanic, Hispanic, and Asian or other race. In this case, white non-Hispanics were the reference group (for other covariates, see Table 2).

A *metropolitan sprawl index*, developed for Smart Growth America (SGA), was used in this study to mea-

Table 1

Sample Sizes (n), Means, and Standard Deviations (SD) for Health Behavior and Health Status Variables, 1998 to 2000*

	n for County Models With All Covariates (N = 206,992)†	n for Metropolitan Models With All Covariates (N = 175,609)	Means (SD) for County Models	Means (SD) for Metropolitan Models
Any physical activity‡	149,835	126,893	0.730 (0.444)	0.733 (0.442)
Recommended physical activity§	135,344	115,006	0.268 (0.443)	0.273 (0.445)
Minutes walked‖	147,305	124,764	247.8 (493.3)	251.2 (499.6)
Body mass index (BMI, kg/m^2)	137,263‡‡	116,779‡‡	26.06 (5.15)	26.03 (5.15)
Obesity¶	137,409‡‡	116,913‡‡	0.181 (0.385)	0.181 (0.385)
Hypertension#	85,465	68,927	0.239 (0.426)	0.235 (0.424)
Diabetes**	142,685‡‡	121,292‡‡	0.056 (0.230)	0.055 (0.228)
Coronary heart disease††	40,651	31,563	0.042 (0.201)	0.041 (0.197)

* For exact wording of Behavioral Risk Factor Surveillance System (BRFSS) questions and to see how calculated variables were determined, go to http://www.cdc.gov/brfss/calcvars.htm.
† N, initial sample before any BRFSS variables entered.
‡ Reported any leisure time physical activity in the last month.
§ Met recommended level of physical activity in the last month: Recommended amount is 30 minutes of moderately intense physical activity at least 5 days per week and/or 20 minutes of vigorously intense physical activity at least 3 days per week.
‖ Minutes walked for leisure during last month.
¶ BMI ≥ 30.
# Ever been told had hypertension.
** Ever been told had diabetes.
†† Ever been told had coronary heart disease.
‡‡ Includes fruit and vegetable consumption as a covariate, which reduced sample size.

Table 2

Sociodemographic and Behavioral Covariates From BRFSS Surveys*

Gender	Male (dichotomous)
Age	Ages 18 to 29, 30 to 44, 45 to 64, 65 to 74, 75+ (categorical)
Race/ethnicity	White non-Hispanic, black non-Hispanic, Hispanic, other race (categorical)
Education	College graduate, some college, high school graduate, less than high school (categorical)
Smoking	Currently smoke (dichotomous)
Diet	Fruit or vegetable consumption three or more times per day (dichotomous)

* For exact wording of Behavioral Risk Factor Surveillance System (BRFSS) questions and to see how calculated variables were determined, go to http://www.cdc.gov/brfss/calcvars.htm.

sure urban form at the metropolitan level. The metropolitan sprawl index is a linear combination of 22 land use and street network variables. A simpler *county sprawl index* was used to measure urban form at the county level. It is a linear combination of six variables from the larger set, these six being available for counties, whereas many of the larger set are available only for metropolitan areas. The derivation of these indices is described in the "Measures" section.

Sample

BRFSS surveys for 1998, 1999, and 2000 provided data on leisure time physical activity levels, BMI and obesity, hypertension, diabetes, and CHD.[33] Our samples consisted of 206,992 respondents from 448 counties and 175,609 respondents from 83 metropolitan areas for the pooled 1998, 1999, and 2000 BRFSS surveys. These respondents were selected from the larger BRFSS samples because they had known places of residence for which urban sprawl indices were available. Hence, it was possible to link urban sprawl indices directly to health data for all respondents. Data for 3 years were pooled to increase the statistical power of the analysis.

Metropolitan areas, as defined by the U.S. Office of Management and Budget, consist of one or more counties having a high degree of economic and social integration with one another. Our sample of respondents was smaller at the metropolitan than county level because metropolitan sprawl indices were available only for the largest metropolitan areas (500,000 population or more) with complete urban form datasets (all 22 variables that make up the metropolitan sprawl index). The sample of respondents at the county level included residents of counties that are part of smaller metropolitan areas, metropolitan areas with only partial datasets (although always with all six variables that make up the county sprawl index), or both.

As illustrated in Table 1, actual sample sizes varied among BRFSS

outcome measures because of missing responses and exclusion of certain questions in certain years. For instance, physical activity data were collected by all states in 1998 and 2000 but only by certain states in 1999. Although diabetes data were gathered by all states for all 3 years, many cases were lost because fruit and vegetable consumption was included as an explanatory variable in the diabetes analysis. Fruit and vegetable consumption data were collected by all states in 1998 and 2000 but by only a small subset of states in 1999.

Sample sizes for individual counties ranged from 6 to 6429, with 353 counties having samples of 50 or more. Sample sizes were more than adequate to support stable and powerful statistical analysis. HLM uses the method of maximum likelihood to optimally combine information from different samples. In this study, counties with small samples contributed less information to the estimation of parameters than counties with large samples. Because maximum likelihood took into account the information from each county and because the number of counties in this study was large (n = 448), counties with small samples were not problematic from a statistical standpoint.[34–36]

Measures

BRFSS is a population-based, random digit–dialed telephone survey administered to U.S. civilian noninstitutionalized adults aged ≥18 years. For the years under study, BRFSS collected data from 150,000 to 185,000 respondents in the 50 states and the District of Columbia. Surveys consisted of a core module of questions asked annually, a rotating core asked every other year, and optional modules asked at states' discretion. A recent review found high reliability and validity for demographic questions (e.g., age, sex, race) and moderate to high reliability and validity for behavioral and health status questions (e.g., hypertension, diabetes, level of physical activity, weight, BMI, fruit and vegetable consumption).[37] Further information on specific questions and how variables were calculated can be found at http://www.cdc.gov/brfss/index.htm.

Smart Growth America's *metropolitan sprawl index*, used in this study to represent urban form at the metropolitan level, is the most comprehensive representation of sprawl for metropolitan areas yet developed. Technical details, including operational definitions, are available in the full technical report at the SGA web site (www.smartgrowthamerica.org).

To construct the index, 83 metropolitan areas in the United States with a total population of more than 150 million people in 2000, over half the U.S. population, were rated in four urban form dimensions. For each dimension, a composite factor was extracted from several observed variables via principal components analysis.

- *Residential density* was defined in terms of gross and net densities and proportions of population living at different densities; seven variables made up the metropolitan density factor.
- *Land use mix* was defined in terms of the degree to which land uses are mixed and balanced within subareas of the region; six variables made up this factor.
- *Degree of centering* was defined as the extent to which development is focused on the region's core and regional subcenters; six variables made up this factor.
- *Street accessibility* was defined in terms of the length and size of blocks; three variables made up this factor.

The four factors were combined into an overall index by summing them and then adjusting for the size of the metropolitan area. The four were given equal weight in the overall index. Scores were then converted to a scale with a mean of 100 and standard deviation of 25. The bigger the value of the index, the more compact the metropolitan region. The smaller the value, the more sprawling the metropolitan region. A few metropolitan regions are compact in all dimensions; New York, New York; San Francisco, California; Boston, Massachusetts; and Portland, Oregon rank near the top in overall score. Others near the top, despite one factor score below average, include Jersey City, New Jersey; Providence, Rhode Island; Honolulu, Hawaii; and Omaha, Nebraska. A few regions sprawl badly in all dimensions. These include Atlanta, Georgia; Raleigh-Durham and Greensboro–Winston-Salem–High Point, North Carolina; and Riverside-San Bernardino, California. They rank at or near the bottom in overall score.

In an earlier study, the metropolitan sprawl index was found to have good explanatory power. The index explained a significant proportion of the variance across metropolitan areas in percent walking or taking transit to work, average vehicle ownership, vehicle miles traveled per capita, traffic fatality rates, and ground-level ozone concentration.[38]

In order to examine the effects of urban form at a finer geographic scale, we developed a *county sprawl index* using a process similar to that used to develop the *metropolitan sprawl index*. The county is the smallest geographic unit that can be matched to BRFSS data. The index was estimated for 448 metropolitan counties or statistically equivalent entities (e.g., independent towns and cities). These counties comprised the 101 most populous metropolitan statistical areas, consolidated metropolitan statistical areas, and New England county metropolitan areas in the United States as of the 1990 census, the latest year for which metropolitan boundaries were defined as this study began. Nonmetropolitan counties and metropolitan counties in smaller metropolitan areas were excluded from the sample. More than 183 million Americans, nearly two thirds of the U.S. population, lived in these 448 counties in 2000.

Although sprawl has the four characteristics noted above, only two of these could be measured at the county level: low residential density and poor street accessibility. Six variables became part of the county sprawl index (as shown in Table 3). We used U.S. Census data[39] to derive three population density measures for each county: (1) gross population density (persons per square mile); (2) percentage of the county popula-

Table 3

County Sprawl Index Variables and Factor Loadings

Observed Variable	Factor Loading*
Gross population density in persons per square mile	0.846
% of population living at densities <1500 persons per square mile	−0.698
% of population living at densities >12,500 persons per square mile	0.846
County population divided by the amount of urban land in square miles	0.849
Average block size in square miles	−0.698
% of blocks 1/100 of a square mile or less in size (about 500 feet on a side, a traditional urban block)	0.821

* Correlation with county sprawl index.

tion living at low suburban densities, specifically, densities between 101 and 1499 persons per square mile, corresponding to less than one housing unit per acre; and (3) percentage of the county population living at moderate to high urban densities, specifically, more than 12,500 persons per square mile, corresponding to about eight housing units per acre, the lower limit of density needed to support mass transit. When deriving these county population density measures, we excluded census tracts with fewer than 100 inhabitants per square mile (corresponding to rural areas, desert tracts, and other undeveloped lands) located within the county, because we were only concerned about sprawl in developed areas where the vast majority of residents live. A fourth density variable, the net density in urban areas, was derived from estimated urban land area for each county from the Natural Resources Inventory of the U.S. Department of Agriculture.[40]

Data reflecting street accessibility for each county were obtained from the U.S. Census, based on information concerning block size.[41] A census block is defined as a statistical area bounded on all sides by streets, roads, streams, railroad tracks, or geopolitical boundary lines, in most cases. A traditional urban neighborhood is composed of intersecting bounding roads that form a grid, with houses built on the four sides of the block, facing these roads. Therefore, the length of each side of that block, and therefore its block size, is relatively small. By contrast, a contemporary suburban neighborhood does not make connections between adjacent cul-de-sacs or loop roads. Instead, local streets only connect with the road at the subdivision entrance, which is on one side of the block boundary. Thus, the length of a side of this block is quite large, and the block itself often encloses multiple subdivisions to form a superblock a half mile or more on a side. Large block sizes indicate a relative paucity of street connections and alternate routes.

For each county, we calculated (1) average block size and (2) percentage of blocks with areas less than 1/100 square mile, the size of a typical traditional urban block bounded by sides just over 500 feet in length. Tracts with blocks larger than 1 square mile were excluded from these calculations because they were likely to be in rural or other undeveloped areas.

The six variables were combined into one factor representing degree of sprawl within the county. This was accomplished via principal components analysis. The principal component selected to represent sprawl was the one capturing the largest share of common variance among the six variables (i.e., the one on which the observed variables loaded most heavily; see Table 3). This one component explained almost two thirds of the variance in the dataset (63.4%). Because this component captured the majority of the combined variance of these variables, no subsequent components were considered.

To derive a county sprawl index, we transformed the principal component, which had a mean of 0 and standard deviation of 1, to a scale with a mean of 100 and standard deviation of 25. This transformation produced a more familiar metric (like an IQ scale) and ensured that all values would be positive, thereby enhancing our ability to test nonlinear relationships.

The bigger the value of the index, the more compact the county. The smaller the value, the more sprawling the county. Scores ranged from a high of 352 to a low of 63. At the most compact end of the scale were four New York City boroughs—Manhattan, Brooklyn, The Bronx, and Queens; San Francisco County, California; Hudson County (Jersey City), New Jersey; Philadelphia County, Pennsylvania; and Suffolk County (Boston), Massachusetts. At the most sprawling end of the scale were outlying counties of metropolitan areas in the Southeast and Midwest, such as Goochland County in the Richmond, Virginia, metropolitan area and Geauga County in the Cleveland, Ohio, metropolitan area. The county sprawl index is positively skewed. Most counties clustered around intermediate levels of sprawl. In the United States, few counties approach the densities of New York or San Francisco counties. (A complete list of counties and their respective "sprawl" scores is available on request.)

Analysis

In this cross-sectional, ecologic study, relationships between urban sprawl and leisure time physical activity levels, BMI and obesity, hypertension, diabetes, and CHD were estimated with HLM 5 (Hierarchical Linear and Nonlinear Modeling) software.[42] Many BRFSS respondents share characteristics of a given place, which tends to produce a dependence among respondents, violating the independence assumption of ordinary least squares (OLS) regression. Standard errors of regression coefficients associated with place characteristics based on OLS will consequently be underestimated. Moreover, OLS regression coefficient estimates will be inefficient. Hierarchical (multilevel) modeling overcomes these limitations, accounting for the dependence among respon-

dents residing in a given place and producing more accurate standard error estimates.[43]

The hierarchical models estimated in this study can be characterized as pairs of linked statistical models. At the first level, respondent health status or behavior were modeled within each place as a function of respondent characteristics plus a random error. Thus, each place had a place-specific regression equation that described the association between respondent characteristics and respondent health status or behavior within that place. At the second level, the place-specific intercept and coefficients were conceived as outcomes and were modeled in terms of place characteristics plus random effects.

In some HLM models, only the place-specific intercepts vary across places, and all of the place-specific regression coefficients are invariant across places. These are often termed "random intercept" models to denote that only the intercept randomly varies. In other HLM models, the place-specific regression coefficients randomly vary as well. These are often termed "random coefficient" models.

In this study, all models initially assumed the random intercept form. Only the intercept term in the place-specific model was allowed to vary, and all place-specific coefficients were taken as fixed. Then this assumption was relaxed, and coefficients were allowed to vary as a function of place characteristics, effectively permitting interactions between place and respondent characteristics.

Interactions between place and respondent characteristics were seldom significant and never sufficiently large to appreciably affect the relationships between place characteristics and outcome variables. Hence, the only results reported are for random intercept models.

Linear models were estimated for continuous outcome variables such as minutes of walking per month. Nonlinear models were estimated for the binary outcomes such as meeting or failing to meet recommended physical activity levels; specifically, the log-odds of the outcome was equated to a linear function of the explanatory variables.

Using HLM software, we were able to apply BRFSS final weights to observations, thereby partially accounting for different probabilities of sample selection and survey response. However, we were unable to account for the complex cluster and stratified sample survey designs used by state health departments when conducting the health surveys on which this study relies. This capability lies beyond the current HLM software.[a]

RESULTS

County-level Analysis

Physical Activity Outcomes. As has been found in previous research, the likelihood of engaging in any leisure time physical activity in the past month was greater for males than females and for white non-Hispanics than other races/ethnicities. The likelihood declined with age and increased with educational attainment (see Table 4 for regression coefficients, *t*-ratios, and significance levels).

The likelihood of engaging in recommended levels of physical activity in the past month followed a similar pattern, with one exception. Those age 65 or older were more likely to meet recommended levels than were younger adults because of the greater amount of leisure time walking they do.

The amount of leisure time walking was greater for females than males and increased with age up to 75 years. Education was positively associated with minutes of walking and being physically active in general.

Controlling for these covariates, the likelihood of reporting any leisure time physical activity was not significantly related to the county index ($t = 1.01$, $p = .313$). The likelihood of getting recommended levels of physical activity was related to the county index, but just short of the traditional .05 probability level ($t = 1.94$, $p = .052$). The number of minutes walked varied directly with the county index, with residents of more compact places reporting more leisure time walking than residents of more sprawling places. The difference was not large but was statistically significant ($t = 2.95$, $p = .004$).

All else being equal, residents of a county one standard deviation (25 units) above the mean county index would be expected to walk for leisure 14 minutes more each month compared to residents of a county one standard deviation below the mean (i.e., 50 units × 0.275 minutes per unit). Comparing the extremes (New York County with an index of 352 and Geauga County with an index of 63), New York residents would be expected to walk for leisure 79 minutes more each month.

Weight-related Outcomes. BMI was higher for males than females; increased with age up to middle age (45 to 64 years), and then declined; was higher for blacks and Hispanics than for whites and lower for other races (primarily Asian); was higher for the less educated relative to the college educated; was lower for smokers than nonsmokers; and was lower for those who consume three or more servings of fruits and vegetables daily (Table 5).

After controlling for these covariates, the county index was related to BMI in the expected direction and at a highly significant level ($t = -2.84$, $p = .005$). Residents of a more compact county, one standard deviation above the mean county index, would be expected to have BMIs 0.17 kg/m^2 lower than residents of a more sprawling county, one standard deviation below the mean (i.e., 50 × −.00344). Again, comparing the extremes, New York residents would have BMIs almost 1 kg/m^2 less than their counterparts in Geauga County. For the BRFSS sample mean BMI (26.1 kg/m^2), this translates into 6.3 fewer pounds of body weight.

The binary variable obesity was also modeled and had a highly significant relationship to the county index ($t = 4.24$, $p < .001$). The odds of being obese in a more compact county, one standard deviation above the mean county index, were 0.90

[a] To account for the complexities of the BRFSS sample survey design, the package of choice is SUDAAN. However, SUDAAN software is not capable of multilevel modeling, a significant shortcoming in a study of this sort.

Table 4

Relationship Between Individual Characteristics, County Sprawl Index, and Leisure Time Physical Activity, 1998 to 2000 (With Coefficients, *t*-ratios, and Significance Levels)

	Any Physical Activity			Recommended Physical Activity			Minutes Walked		
	Coefficient	*t*	*p*	Coefficient	*t*	*p*	Coefficient	*t*	*p*
Male	0.246	12.1	<0.001	0.087	4.44	<0.001	−82.5	−22.1	<0.001
Age 30 to 44	−0.396	−14.7	<0.001	−0.228	−8.17	<0.001	39.4	7.95	<0.001
Age 45 to 64	−0.596	−17.5	<0.001	−0.159	−5.68	<0.001	102.2	14.9	<0.001
Age 65 to 74	−0.639	−13.6	<0.001	0.054	1.38	0.167	139.7	16.4	<0.001
Age 75+	−1.067	−26.7	<0.001	0.187	4.78	<0.001	74.1	6.65	<0.001
Black non-Hispanic	−0.322	−10.9	<0.001	−0.176	−4.96	<0.001	4.24	0.62	0.537
Hispanic	−0.625	−14.7	<0.001	−0.217	−6.15	<0.001	−27.6	−3.58	0.001
Other race	−0.553	−9.43	<0.001	−0.276	−4.49	<0.001	−37.8	−3.26	0.001
Some college	−0.417	−13.3	<0.001	−0.226	−10.3	<0.001	−8.33	−1.66	0.097
High school graduate	−0.854	−31.8	<0.001	−0.525	−21.1	<0.001	−19.8	−3.74	<0.001
Less than high school	−1.353	−39.6	<0.001	−0.946	−20.9	<0.001	−65.3	−9.24	<0.001
Currently smoke	−0.357	−15.7	<0.001	−0.273	−11.0	<0.001	−5.65	−1.16	0.245
County sprawl index	0.000552	1.01	0.313	0.000872	1.94	0.052	0.275	2.95	0.004

Table 5

Relationship Between Individual Characteristics, County Sprawl Index, and Weight, 1998 to 2000 (With Coefficients, *t*-ratios, and Significance Levels)

	Body Mass Index			Obesity		
	Coefficient	*t*	*p*	Coefficient	*t*	*p*
Male	1.190	22.4	<0.001	0.0535	2.07	0.038
Age 30 to 44	1.696	27.7	<0.001	0.578	16.0	<0.001
Age 45 to 64	2.547	43.0	<0.001	0.852	24.2	<0.001
Age 65 to 74	1.995	23.5	<0.001	0.574	12.3	<0.001
Age 75+	0.517	6.29	<0.001	0.0542	0.98	0.327
Black non-Hispanic	1.604	20.1	<0.001	0.563	17.5	<0.001
Hispanic	0.744	8.71	<0.001	0.308	6.45	<0.001
Other race	−1.075	−10.2	<0.001	−0.448	−7.32	<0.001
Some college	0.818	14.7	<0.001	0.397	13.7	<0.001
High school graduate	1.102	17.9	<0.001	0.520	17.0	<0.001
Less than high school	1.693	19.7	<0.001	0.758	17.4	<0.001
Currently smoke	−0.985	−16.6	<0.001	−0.381	−11.4	<0.001
Fruit/vegetable consumption	−0.327	−7.54	<0.001	−0.154	−5.94	<0.001
County sprawl index	−0.00344	−2.84	0.005	−0.00212	−4.24	<0.001

times the odds in a more sprawling county, one standard deviation below the mean index (95% CI, 0.86 to 0.95). Table 6 reports odds ratios and confidence intervals for all binary outcome variables.

Morbidity Outcomes. Males were more likely to report having diabetes and coronary heart disease than were females. The probability of having these conditions, as well as hypertension, generally increased with age. The probability of having hypertension and diabetes generally decreased with educational attainment. Probabilities varied with race in more complex ways (Table 7).

The only morbidity outcome statistically linked to sprawling places was hypertension ($t = -2.37$, $p = .018$). The odds of suffering from hypertension in a more compact county, one standard deviation above the mean sprawl index, was 0.94 times the odds in a more sprawling county, one standard deviation below the mean index (95% CI, 0.90 to 0.99). As for diabetes and coronary heart disease, the county index had the expected sign in both equations, but the relationships were not statistically significant.

Direct and Indirect Effects on BMI and Obesity. To explore the mechanisms by which sprawl affects BMI and obesity, additional analyses were conducted that included *minutes walked* as an independent variable in the level-1 equations for both BMI and obesity. We wanted to see whether living in compact counties was independently

Table 6

Odds of Leisure Time Physical Activity, Obesity, and Morbidity One Standard Deviation Above the Mean County Sprawl Index Compared to One Standard Deviation Below, 1998 to 2000

	Odds Ratio (95% Confidence Interval)
Any physical activity	1.028 (0.974–1.084)
Recommended physical activity	1.045 (0.996–1.092)
Obesity	0.899 (0.856–0.945)
Hypertension	0.942 (0.897–0.990)
Diabetes	0.971 (0.930–1.014)
Coronary heart disease	0.994 (0.988–1.000)

related to weight, after controlling for the amount of reported leisure time walked. Results are presented in Table 8. Both variables—minutes walked and county index—were significantly (and independently) associated with BMI. BMI declined as leisure time walking increased at the individual level, and BMI declined as the county index increased at the population level. The same pattern applied to the binary variable obesity.

Thus, sprawl appears to have direct relationships to BMI and obesity, plus indirect relationships through the number of minutes walked, which varies with the county sprawl index. A portion of the overall sprawl-weight relationship is mediated through the amount of time people spend walking for leisure. The direct effect is much stronger. A 25-unit increase in the county index (1 SD) is associated directly with a .085 kg/m^2 (25 × .00338) decrease in BMI. The same 25-unit increase is associated indirectly with only a .001 kg/m^2 (25 × 0.275 × .000128) decrease in BMI through its effect on leisure time walking.

Metropolitan-level Analysis

We also examined relationships between sprawl at the metropolitan level and health and health-related behaviors (see Table 9). The metropolitan sprawl index proved significantly related to only one outcome variable, *minutes walked* as a leisure time activity (t = 2.09, p = .04). Model coefficients for the county and metropolitan sprawl indices can be compared because they were standardized on the same basis, with means of 100 and standard deviations of 25. In most cases, the county index was more strongly associated with outcomes than was the metropolitan index.

DISCUSSION

This ecologic study reveals that urban form could be significantly associated with some forms of physical activity and with some health outcomes. After controlling for demographic and behavioral covariates, the county sprawl index had small but significant associations with minutes walked (p = .004), obesity (p < .001), BMI (p = .005), and hypertension (p = .018). Those living in sprawling counties were likely to walk less, weigh more, and have greater prevalence of hypertension than those living in compact counties. At the metropolitan level, sprawl was similarly associated with minutes walked (p = .04) but not with the other variables.

Although the magnitude of the effects observed in this study are small, they do provide added support for the hypothesis that urban form affects health and health-related behaviors. Furthermore, as Geoffrey Rose has pointed out, even a small shift in

Table 7

Relationship Between Individual Characteristics, County Sprawl Index, and Morbidity, 1998 to 2000 (With Coefficients, *t*-ratios, and Significance Levels)

	Hypertension			Diabetes			Coronary Heart Disease		
	Coefficient	*t*	*p*	Coefficient	*t*	*p*	Coefficient	*t*	*p*
Male	0.0191	0.74	0.46	0.221	7.32	<0.001	0.0207	13.1	<0.001
Age 30 to 44	0.689	16.8	<0.001	1.064	12.8	<0.001	0.0164	10.4	<0.001
Age 45 to 64	1.778	44.5	<0.001	2.435	31.7	<0.001	0.0594	31.8	<0.001
Age 65 to 74	2.435	52.2	<0.001	2.958	37.2	<0.001	0.0949	18.3	<0.001
Age 75+	2.456	48.9	<0.001	2.736	34.8	<0.001	0.123	19.8	<0.001
Black non-Hispanic	0.597	15.5	<0.001	0.731	18.5	<0.001	0.0167	−4.19	<0.001
Hispanic	−0.101	−1.10	0.27	0.413	7.38	<0.001	−0.0304	−5.40	<0.001
Other race	0.0203	0.24	0.81	0.284	3.06	0.003	−0.0168	−3.07	0.003
Some college	0.253	7.41	<0.001	0.361	8.33	<0.001	0.0162	7.47	<0.001
High school graduate	0.287	7.73	<0.001	0.383	9.66	<0.001	0.0128	5.93	<0.001
Less than high school	0.427	11.4	<0.001	0.869	18.2	<0.001	0.0680	8.62	<0.001
Currently smoke	−0.0454	−1.51	0.13	−0.232	−5.68	<0.001	−0.00087	−0.43	0.67
Fruit/vegetable consumption	—	—	—	0.0909	2.63	0.009	—	—	—
County sprawl index	−0.00119	−2.37	0.018	−0.00059	−1.32	0.19	−0.00011	−1.82	0.069

the distribution at the population level can have important public health implications.[44]

Heretofore, BRFSS data have not generally been used to examine county- or metropolitan-level relationships. In this study, the consistency of findings with those generally found in previous research on associations between health outcomes and covariates, such as gender, age, and race/ethnicity, provides some assurance that our observations on health and urban form also have validity.

Our finding that relationships are stronger for the county index than for the larger scale metropolitan index is not surprising. Most metropolitan areas consist of multiple counties whose built environments vary significantly between central and outlying counties. The county environment might be more representative of what is actually experienced on a day-to-day basis by residents than is the overall metropolitan environment. By implication, as research shifts from the macroscale (metropolitan and county) to the meso- and microscales (community and neighborhood), we might expect that the explanatory power of environmental variables to predict outcomes will improve.

This study is exploratory and subject to important limitations that call for additional research.

- Because this study is ecologic and cross-sectional in nature, it is premature to imply that sprawl causes obesity, hypertension, or any other health condition. Our study simply indicates that sprawl is associated with certain outcomes. Future research using quasi-experimental designs is needed to tackle the more difficult job of testing for causality.
- As shown in Figure 1, the presumptive relationships between environment (urban form), physical activity, and health are multiple and complex. In particular, leisure time physical activity constitutes only one of four major sources of physical activity, the others being related to occupation, household, and transportation. Greater precision in characterizing physical activity will help disentangle the effects of urban form on health. Recognizing the need to monitor more than just leisure time physical activity, the 2001 BRFSS questions were modified to include transportation-, household-, and work-related physical activity.
- In this study, we were not able to account for the complex nature of the BRFSS sampling design, reinforcing the need for cautious interpretation of these early findings. There is growing interest in using BRFSS at the local level, and CDC is in the process of developing methods to adjust the state-based weights for use at the local level.
- Better measures of walking are needed to improve our ability to trace potential differences that are attributable to urban form. The variable *minutes walked* is based on people who reported walking as one of their top two forms of leisure time activity. It excludes walking as a less frequent form of leisure time activity

Table 8

Relationship of County Sprawl Index and Leisure Time Walking to Body Mass Index (BMI) and Obesity, 1998 to 2000*

	County Index			Minutes Walked		
	Coefficient	*t*	*p*	Coefficient	*t*	*p*
BMI	−0.00338	−2.87	0.005	−0.000128	−2.93	0.004
Obesity	−0.00216	−4.35	<0.001	−0.000061	−2.30	0.022

* Models included gender, age, race, education, smoking status, fruit and vegetable consumption, and minutes of walking for leisure as level-1 covariates.

Table 9

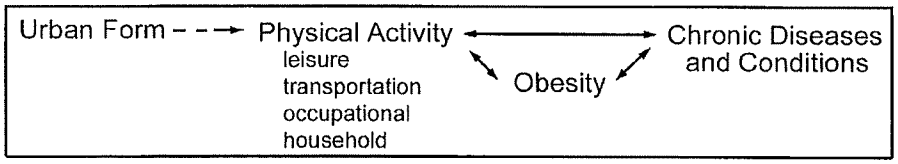
Comparison of Relationships of County and Metropolitan Sprawl Indices to Leisure Time Physical Activity, Obesity, and Morbidity Outcomes, 1998 to 2000*

	County Index			Metropolitan Index		
	Coefficient	*t*	*p*	Coefficient	*t*	*p*
Any physical activity	0.000552	1.01	0.313	0.000760	0.83	0.411
Recommended physical activity	0.000872	1.94	0.052	0.00141	1.49	0.139
Minutes Walked	0.275	2.95	0.004	0.338	2.09	0.040
BMI	−0.00344	−2.84	0.005	−0.00142	−1.03	0.307
Obesity	−0.00212	−4.24	<0.001	−0.000800	−1.02	0.312
Hypertension	−0.00119	−2.37	0.018	−0.000325	−0.49	0.626
Diabetes	−0.000586	−1.32	0.187	−0.000400	−0.60	0.548
Coronary heart disease	−0.000113	−1.82	0.069	na		

* Models included gender, age, race, education, and smoking status as level-1 covariates. Models for body mass index (BMI), obesity, and diabetes also included fruit and vegetable consumption.

Figure 1

Established (Solid) and Speculative (Dashed) Relationships



or walking for other purposes. The new BRFSS questions should help produce more comprehensive measures of walking.

- We recognize that the relationships between sprawl and behavior or weight are probably not completely linear. It might be that certain thresholds or critical levels of "compactness" are needed before community design begins to have a palpable influence on physical activity—increasing density from one or two houses per acre to three or four might not meet the threshold needed for change. Subsequent research will have to explore threshold effects.
- This study relates physical activity and health to the built environment at the county and metropolitan levels, which are large areas compared to the living and working environments of most residents. If environmental effects are felt most strongly at the community or neighborhood level, at least for walking, this study needs to be supplemented with research at a finer geographic scale. Future research will need to use geographic information system (GIS) data to hone in on the specific living and working environments of individuals.
- Because they are not directly measured in either of the sprawl indices, many other environmental variables that might act directly or interact to influence physical activity, such as availability and quality of parks, sidewalks, and bike trails, are not accounted for in this study. Also missing from this analysis are potentially important environmental variables such as climate, topography, and crime. Future research will have to fill this void by specifying more complete outcome models.
- By focusing on physical activity, this study largely ignores the other side of the energy equation—calories consumed as opposed to calories expended. In this study, leisure time walking accounts for only a small portion of the relationship between urban form and BMI. Although we expect other forms of physical activity to fill some of this gap, differing patterns of food consumption must also be explored. Only our fruit and vegetable consumption variable begins to get at that dimension of the problem. Caloric intake could have a spatial component. Future research could, for example, relate the density of fast food restaurants and availability of food choices to diet and obesity.

The growing interest in how policies and the environment serve to encourage or discourage health-related behaviors is attested to by the new focus on these issues in journals such as this one and by new initiatives of governmental and nongovernmental organizations such as the CDC, with its Active Community Environments (ACES) research group, and Robert Wood Johnson Foundation, with its commitment of more than 70 million dollars to promote active living. Over the past several decades, we have engineered much of the physical activity out of our daily lives. Now our task is to understand how opportunities for physical activity can be revived.

SO WHAT: Implications for Health Promotion Practitioners and Researchers

This exploratory study seems to indicate that, after controlling for individual differences, those living in sprawling counties are likely to walk less in their leisure time, weigh more, and have greater prevalence of hypertension than those living in more compact places. Combined with other research from public health and urban planning, there is moderate support for the assertion that urban form can have significant (positive or negative) influences on health and health-related behaviors.

If this assertion holds true, health practitioners can improve public health by advocating for more compact development patterns. Public health researchers can refine their understanding of physical activity, obesity, and morbidity by including urban form variables in their analyses.

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Social Capital and the Built Environment: The Importance of Walkable Neighborhoods

Kevin M. Leyden, PhD

Objectives. I sought to examine whether pedestrian-oriented, mixed-use neighborhoods encourage enhanced levels of social and community engagement (i.e., social capital).

Methods. The study investigated the relationship between neighborhood design and individual levels of social capital. Data were obtained from a household survey that measured the social capital of citizens living in neighborhoods that ranged from traditional, mixed-use, pedestrian-oriented designs to modern, car-dependent suburban subdivisions in Galway, Ireland.

Results. The analyses indicate that persons living in walkable, mixed-use neighborhoods have higher levels of social capital compared with those living in car-oriented suburbs. Respondents living in walkable neighborhoods were more likely to know their neighbors, participate politically, trust others, and be socially engaged.

Conclusions. Walkable, mixed-use neighborhood designs can encourage the development of social capital. (*Am J Public Health.* 2003;93:1546–1551)

A growing number of researchers agree that social networks and community involvement have positive health consequences. Persons who are socially engaged with others and actively involved in their communities tend to live longer and be healthier physically and mentally.[1–12]

> The more integrated we are with our community, the less likely we are to experience colds, heart attacks, strokes, cancer, depression, and premature death of all sorts. . . . Over the last 20 years more than a dozen large studies . . . have shown that *people who are socially disconnected are between 2 and 5 times more likely to die from all causes, compared with matched individuals who have close ties with family, friends, and the community.*[13(p326–327)]

Social and community ties are key components of a more encompassing concept, *social capital.* Social capital is defined as the social networks and interactions that inspire trust and reciprocity among citizens.[13] Individuals with high levels of social capital tend to be involved politically, to volunteer in their communities, and to get together more frequently with friends and neighbors. They are also more likely to trust or to think kindly of others.[13–15] Social capital has been found to be linked to more than just good health; empirical linkages have been found among social capital, the proper functioning of democracy, the prevention of crime, and enhanced economic development.[13]

An understanding of why some persons and some communities have more social capital than others is important to improving public health. Factors associated with the decline of social capital in recent decades include pressures of time and money on families, long commutes, television usage, and generational change.[13] Many of these factors appear to be related to suburbanization.[16,17]

This study examined whether the built environment (i.e., the way we design and build our communities and neighborhoods) affects the degree to which people are involved in their communities and with each other. The fundamental premise is that some neighborhood designs *enable or encourage* social ties or community connections, whereas others do not. Theoretically, the neighborhood designs (or types) most likely to promote social capital are those that are mixed use and pedestrian oriented. Such neighborhoods (usually labeled "traditional" or "complete" neighborhoods) are typically found in older cities and older rural towns.[18] These neighborhoods are walkable, enabling residents to perform daily activities (e.g., grocery shopping, going to the park, taking children to school) without the use of a car. Many of these neighborhoods have places of worship, a local tavern, a coffee shop, or restaurants within walking distance. Complete or traditional neighborhoods encourage walking; pedestrians are not forced to compete with cars along busy highways or to walk across expansive parking lots.

This traditional or complete neighborhood design can be contrasted with its modern suburban counterpart. Today's version of the neighborhood, the suburban subdivision, contains only houses. Daily needs are not met in the neighborhood or even in town; they are instead fulfilled at large megastores in malls or strip malls located along 4-lane connector roads that are typically clogged with traffic. If residents want to shop, worship, or go to a restaurant, pub, park, or library, they must travel by car. Many contemporary suburban subdivisions do not even have sidewalks: citizens must drive to find a place to exercise or to go for a walk.

Theoretically, pedestrian-oriented, mixed-use neighborhoods are expected to enhance social capital because they enable residents to interact. This interaction can be intentional or accidental. Spontaneous "bumping into" neighbors, brief (seemingly trivial) conversations, or just waving hello can help to encourage a sense of trust and a sense of connection between people and the places they live. These casual contacts can occur at neighborhood corner shops, at local parks, or on the sidewalk. To many residents, such contacts breed a sense of familiarity and predictability that most people find comforting. When summed over time, these individual occurrences have been theorized to be of great importance for fostering "a web of public respect and trust, and a resource in time of personal or neighborhood need."[19(p56)]

In contrast, most contemporary suburban subdivisions do little to enable social interaction. Social interaction is more likely to occur by invitation, not by chance encounter. Life is supposed to take place within the home or in

the backyard.[20] In many suburbs, privacy and the automobile are so highly valued that developers do not even bother to lay sidewalks. Corner stores, taverns, coffee shops, and sometimes schools and parks often are not found in the neighborhood, because zoning ordinances have rendered them illegal within residential areas. Most modern, car-dependent suburbs are not places designed to encourage social interaction.

This study examined the relationship between neighborhood design and social capital. The main hypothesis is that pedestrian-oriented, mixed-use neighborhoods are more likely to encourage social capital than are car-dependent, single-use neighborhoods.

METHODS

To examine the relationship between neighborhood design and social capital, a survey was conducted in and around the city of Galway, located in the Republic of Ireland. Galway's population was estimated at 65 457 in April 2001, with an additional 30 000 people living "in the immediate environs."[21] Galway is the fastest-growing city in Ireland and one of the fastest-growing cities in Europe. It was chosen for this analysis because it has a mix of neighborhood types ranging from the truly mixed-use, pedestrian-oriented variety (built centuries before the automobile) to the contemporary, American-style suburb. Moreover, Galway has no experience with the racism and "white flight" from the city centers that has historically affected American cities and that in many ways continues to distort decisions regarding where to live.

During April and May of 2001, 750 households in Galway and its suburbs were surveyed by mail. The cover letter asked that the survey be completed and returned by 1 adult member (aged 18 years or older) of each selected household. To sample from a variety of neighborhood types, 8 neighborhoods or suburban subdivisions were chosen. In 6 of these neighborhoods (or suburban subdivisions), a survey was delivered to each and every residence. In the other 2, a portion of the subdivision was chosen at random because of the subdivision's size. In this portion or part of the subdivision, all houses received a survey. A total of 279 surveys were returned, for an overall response rate of 37.2%. No follow-up surveys were mailed.

Neighborhood Categories

Galway's neighborhoods were subjectively categorized into 3 ideal types by the researcher before conducting the survey. The neighborhoods selected and surveyed include the following 3 types.

City Center/Near City Center Neighborhoods. The category of "city center/near city center" includes mixed-use, pedestrian-oriented neighborhoods where all daily needs and forms of entertainment are a short walk away. Residents living in these neighborhoods could walk to restaurants, pubs, parks, libraries, department stores, government buildings, post offices, butchers, banks, pharmacies, local schools, theatres, and places of worship without seriously competing with cars.

Older, Mixed-Use Suburbs. Galway has several older suburbs that incorporate some of the more positive aspects of both the traditional city center neighborhood and the quiet suburb. Renmore, for example, has many traditional neighborhood amenities, such as local schools, a few neighborhood corner shops, a centrally located bus line, a church, community center, and playing fields. However, it is much quieter and more predictable than Galway's city center neighborhoods, and the range of places one could access by foot is clearly more limited.

Modern, Automobile-Dependent Suburbs. Galway's recent economic boom has created a demand for new housing that has been met by creating new suburbs. These modern suburbs are car oriented; even local stores have a strip-mall feel about them. With parking lots positioned in front, they seem to suggest that driving is expected. Few places can be accessed by foot, and many of these suburbs do not have sidewalks or parks.

Key Independent Variable: Individual Assessments of Neighborhood Walkability

Categorization of Galway's various neighborhoods ensured that the individuals in the study's sample lived in a range of neighborhood types. In most of the following analysis, however, the assessment of neighborhood "walkability" was made by the respondents, not by the researcher. All survey respondents were asked to rate the degree to which their neighborhoods were pedestrian oriented and mixed use (Figure 1). This question was used to create a variable called "neighborhood walkability," which is an additive index of the 9 places listed in Figure 1. Each respondent was assigned a neighborhood walkability score that could range from 0 (cannot walk to any of the places mentioned) to 9 (can walk to all of them).

A lot of people are very dependent on a car these days to get where they want to go. If you or another family member wanted to which of the following could you walk to without too much trouble? *Tick all you could walk to without too much trouble.*

___1. A local corner shop/newsagent
___2. A church
___3. A park (or pitch)
___4. A local school
___5. A Community Center or Recreation Center
___6. A crèche (or child care facility)
___7. A Chemist (or pharmacy)
___8. A Pub
___9. The place that I work
___10. None of the above. It is hard to really go anywhere without a car.

FIGURE 1—Survey questions used to create the "neighborhood walkability" measure.

Additional independent variables in the multivariate models include controls found to correlate with various aspects of social capital in previous political science and sociological studies.[13,22–25] These measures included age, whether a respondent has children currently living at home ("child in home"), how much television a respondent watches ("watch TV"), whether and to what degree a respondent attends religious services, how long a respondent has lived in his or her current neighborhood ("years in the neighborhood"), education level, and the degree to which a respondent reports being committed to a political party ("party strength").

Dependent Variables: Measures of Social Capital

The survey conducted for this study measured 4 key aspects of social capital: how well residents knew their neighbors, their political participation, their trust or faith in other people, and their social engagement. These dependent variables were measured as described in the following paragraphs.

The variable "know neighbors" was measured with the following question: "Think about the neighborhood or area in which you live. In general, how well do you feel you know your neighbors? (1) Not at all, (2) Just a little, (3) Moderately well, (4) Extremely well."

Political participation was measured as an additive index. The Political Participation Index assessed whether respondents voted in the last general election, whether they had volunteered to work for a political party in the past 5 years, and whether they had contacted an elected official to express their views in the past 6 months. Each of these activities was scored as either 1 (yes) or 0 (no), and scores were added to create the index. Thus, for each respondent, the variable could range from 0 (no participation) to 3 (yes to all 3 items).

The Trust Index measured whether respondents felt that people could be trusted, whether they thought people were fair, and whether they thought most people try to be helpful. Scores on this index could also range from 0 (a complete absence of trust and faith in others) to 3 (respondent feels that people can be trusted, are fair, and are helpful).

Social participation was measured with 4 questions probing the degree to which respondents reported being engaged socially. The first question asked respondents to report how often they got together with friends: "rarely," "occasionally," or "a great deal." The next 3 questions asked respondents to specify the number of times (in the past 2 weeks) they had gone "out to a pub or restaurant with friends"; the number of times they had invited friends into their home "for company, tea, or a meal"; and the number of times they had gone to a friend's home "for company, tea, or a meal." Summing the responses on all 4 items for each respondent yielded an index score reflecting each respondent's degree of social engagement. The mean Social Index score was 7.04, and the standard deviation was 5.41.

Data Analysis

All statistical analyses were performed with Stata, version 7 (Stata Corp, College Station, Tex). The first part of the analysis sought to establish whether the "subjective" categorizations of neighborhood types established by the researcher before the surveys were distributed helped to illustrate some of the differences between walkable and more car-oriented neighborhoods. This was accomplished by examining whether the means of the various aspects of social capital differed statistically (using *t* tests) by neighborhood type.

The heart of the analysis used multivariate ordered logit models to examine the effect of the neighborhood walkability measure on the 4 dependent measures of social capital. Ordered logit was used because of the ordinal nature of the dependent variables. Although all of the dependent measures of social capital can be ranked, the distance between categories cannot be assumed to be equal (as in interval data). In the analysis that follows, the neighborhood walkability measure was scored in 2 ways. In the first set of regressions, neighborhood walkability for each respondent was scored from 0 to 9; in the second set, this variable was recoded to assess the odds of respondents' having high levels of social capital if they assessed their neighborhoods to be highly pedestrian oriented and mixed use (high scores of 7, 8, or 9 were coded as 1, whereas lower scores were coded as 0).

RESULTS

Table 1 illustrates some of the differences between more walkable, mixed-use neighborhoods and those that are car dependent. Shown in the table are the means and corresponding *P* values (based on the *t* tests) of measures related to social capital (note that preinvestigative categorizations of neighborhood types are used). All respondents living in mixed-use, pedestrian-oriented neighborhoods (city center/near city center plus older, mixed-use suburbs) were combined and compared with those living in modern suburbs. Interestingly, neighborhood walkability was statistically significant ($P<.0001$), indicating that respondents' self-assessments of their own neighborhoods coincided with the neighborhood categorizations established by the researcher before administration of the survey. Residents living in neighborhoods categorized as walkable by the researcher perceived their neighborhoods as being more walkable.

Table 1 provides examples of how attitudes and behaviors of residents living in pedestrian-oriented, mixed-use neighborhoods (whether located in older suburbs or in town) differ from those of residents living in car-dependent suburbs. Table 1 displays data demonstrating that in complete or traditional neighborhoods, residents walk more (or at least perceive their neighborhoods to be more walkable), feel more connected to (or part of) their community, are more likely to know their neighbors, are more likely to trust or have faith in other people, are more

TABLE 1—Pedestrian-Oriented, Mixed-Use Neighborhoods vs Modern, Automobile-Dependent Suburbs: Galway, Ireland, 2001

	Comparing Means Using *t* Test		
	Mixed-use, Walkable Neighborhood (n = 163), Mean	Car-Dependent Suburban Neighborhood (n = 109), Mean	*P* Value
Neighborhood walkability	7.35	4.72	.0001
Feel connected to or part of the community	2.94	2.39	.0001
Know neighbors?	2.67	2.22	.0001
Trust Index	2.32	2.09	.0329
Contacting elected officials	0.32	0.17	.0032
Can walk to work	0.51	0.19	.0001

TABLE 2—Multivariate Ordered Logit Models for Social Capital, by Independent Variable: Galway, Ireland, 2001

	Odds Ratio (95% Confidence Interval)			
Independent Variable	Know Neighbors (n = 256)	Political Participation Index (n = 258)	Trust Index (n = 258)	Social Index (n = 258)
Neighborhood walkability	1.28† (1.14, 1.44)	1.14** (1.02, 1.28)	1.15*** (1.04, 1.28)	1.20† (1.09, 1.32)
Age	1.06† (1.03, 1.08)	1.01 (.99, 1.04)	1.02 (0.99, 1.04)	0.95† (0.93, 0.97)
Child in home	2.80† (1.65, 4.75)	1.51 (0.90, 2.53)	1.17 (0.71, 1.91)	0.33† (0.21, 0.53)
Watch TV	0.085 (0.61, 1.17)	0.89 (0.64, 1.23)	0.87 (0.64, 1.18)	0.78* (0.59, 1.04)
Attend religious services	1.20** (1.01, 1.42)	1.14 (0.95, 1.36)	1.03 (0.88, 1.22)	0.97 (0.83, 1.13)
Years in neighborhood	1.03** (1.00,1.05)	1.02 (0.99, 1.04)	0.99 (0.97, 1.02)	0.98* (0.96, 1.00)
Education	0.72 (0.45, 1.17)	1.77** (1.10, 2.83)	0.87 (0.54, 1.39)	1.03 (0.68, 1.57)
Party strength	1.16 (0.88, 1.52)	1.98† (1.50, 2.62)	1.04 (0.80, 1.35)	1.22* (0.96, 1.54)
McKelvey and Zavoina R^2	.44	.19	.07	.26

*P = .10; **P = .05; ***P = .01; †P = .001; 2-tailed test.

likely to contact elected officials to express their concerns, and are more likely to walk to work.

Although suggestive, simple mean comparisons do not control for other factors that might also explain why residents in one neighborhood type demonstrate higher levels of social capital. A multivariate model is needed. Table 2 displays the results of the multivariate ordered logit models examining the impact of neighborhood walkability on various aspects of social capital, after control for other independent variables. The results are clear and consistent: the more places respondents report being able to walk to in their neighborhood, the higher their level of social capital. This relation suggests that walkable, mixed-use neighborhoods are better generators of social capital than are modern, car-dependent suburbs.

The odds ratios (ORs) reported in Table 2 were generated with ordered logit regression. It is important to note that neighborhood walkability scores ranged from 0 to 9 and that the odds ratios must be interpreted with this in mind. A 1-unit increase in neighborhood walkability score is linked with an increase of 1.28 (95% confidence level [CI] = 1.14, 1.44) in the odds that a resident knows his or her neighbors. Therefore, the more walkable a neighborhood (and the more places that can be walked to), the more likely a resident is to know his or her neighbors.

The neighborhood walkability measure was also statistically significant in the equations examining political participation and trust. The higher the neighborhood walkability rating assigned by respondents, the more likely they were to participate politically (OR = 1.14; 95% CI = 1.02, 1.28) and to have trust or faith in others (OR = 1.15; 95% CI = 1.04, 1.28).

The fourth measure of social capital was the Social Index, reflecting the degree to which a respondent reports being socially engaged. The model demonstrated that the more places respondents reported being able to walk to in their neighborhood, the more likely they were to be engaged with others socially (OR = 1.20; 95% CI = 1.09, 1.32). Interestingly, the model also indicated that respondents become less social as they grow older (OR = 0.95; 95% CI = 0.93, 0.97), that people with children living in the home are less social (OR = 0.33; 95% CI = 0.21, 0.53), and that watching TV limits one's social activities (OR = 0.78; 95% CI = 0.59, 1.04).

The neighborhood walkability measure had a statistically significant effect on all of the measures of social capital. No other predictor was consistently significant. Moreover, neighborhood walkability consistently held its own in comparison with the other predictors, often playing a more powerful role. Stata reports a standardized odds ratio (not shown here) based on standard deviational changes in the independent variable.[26] Neighborhood walkability was the most important predictor of the Trust Index, the second most important predictor for the Know Neighbors variable and the Social Index, and a close third for the Political Participation Index.

Table 3 explores the effects had by the most walkable (and most mixed-use) neighborhoods on social capital. Respondents who reported their neighborhoods as being highly walkable and mixed use (7, 8, or 9 on the original neighborhood walkability measure) were compared with those who rank their neighborhoods as less pedestrian oriented and less mixed use, after control for other factors. The results indicated that residents living in high-walkability neighborhoods (many in this category reported walking to work) were likely to score higher on all measures of social capital. The odds ratios ranged from 1.80 to 1.95, and all were statistically significant in the predicted direction.

TABLE 3—Multivariate Ordered Logit Models of Social Capital: Highly Walkable, Mixed-use Designs vs All Others: Galway, Ireland, 2001

	Odds Ratio (95% Confidence Interval)			
	Know Neighbors	Political Participation Index	Trust Index	Social Index
High level of neighborhood walkability or mixed-use design	1.88** (1.14, 3.11)	1.83* (1.10, 3.05)	1.79* (1.10, 2.92)	1.95** (1.25, 3.05)

Note. A high level of neighborhood walkability or mixed-use design was scored 1 if a respondent reported a 7, 8, or 9 on the neighborhood walkability measure and scored 0 otherwise. All other independent control variables were included in the analysis, as in Table 2.
*P = .05; **P = .01; 2-tailed test.

DISCUSSION

This study suggests that the way we design and build our communities and neighborhoods affects social capital and thus physical and mental health. The results indicate that residents living in walkable, mixed-use neighborhoods are more likely to know their neighbors, to participate politically, to trust others, and to be involved socially.

Unfortunately, America's built environment has been moving in a direction that is likely to have a negative effect on social capital. Over the last several decades, buying a home in a neighborhood that resembles the traditional, mixed-use, pedestrian-oriented model has become increasingly difficult. In fact, many Americans have no choice but to live in a modern, car-dependent suburb, because not enough viable, affordable traditional neighborhoods exist; their options are biased toward car-dependent suburban subdivisions, because such environments are what most developers build.[27]

The trend toward building car-dependent subdivisions is not just the fault of the developers. That American communities have become increasingly car oriented and less walkable is also the result of municipal zoning codes and other public policy changes that clearly promote transport by private vehicle, deemphasize public transport, and discourage (or even outlaw) the building of mixed-use, pedestrian-oriented neighborhoods.[18,26] Changing this trend will require political will and a shift in land-use and transportation priorities and policies.[29,30] Public consciousness must also change. Government policy has helped to change the public's view of smoking and of race and gender discrimination; it could help change our concept of the built environment by discouraging sprawl and encouraging the creation of new pedestrian-oriented towns and neighborhoods. Changes in government policy and tax law might also encourage the revitalization of existing traditional neighborhoods.

Of course, before we get to that point, we need to know more about how the built environment affects health and social capital. This study has several limitations. To what degree can the results of this study, which was based on a fairly small Irish city, be generalized? Selection bias also may have affected the results. Social people might be more likely to choose walkable neighborhoods, rather then walkable neighborhoods' encouraging sociability. The models presented in Tables 2 and 3 attempted to statistically control for this possibility by including measures of age and years in the neighborhood. However, the selection bias needs to be untangled; a much larger longitudinal study would be required to do so. In addition, much more must be learned about which architectural aspects of the built environment most affect health and social capital. This study used a measure that allowed respondents to rate the walkability of their own neighborhoods; more information is needed regarding how measures such as block size, density, street widths, and traffic speed affect the perceived walkability of a neighborhood[18–20] and social capital.

Finally, more data must be gathered regarding how the built environment affects health in general.[31] To what extent is our car-dependent, "drive-through" suburban culture discouraging physical activity,[32–34] thus encouraging obesity[35–39] and other associated health problems?[38,39] How does sprawl affect health over the life span? According to the Centers for Disease Control and Prevention, today's built environment is affecting how children travel to school. Instead of walking or biking to school, most children are now driven by bus or private vehicle; the main deterrents to walking or biking are long distances (55%) and traffic danger (40%).[40,41] One must wonder whether the short-sighted planning decisions that lead to so many young people being driven rather than walking will have long-term health consequences. How are the elderly affected? Does car-dependent sprawl contribute to the sort of social isolation that negatively affects the health of seniors? The consequences of not walking and of not interacting with others may have consequences far more negative, for persons of all ages, than we ever imagined. ■

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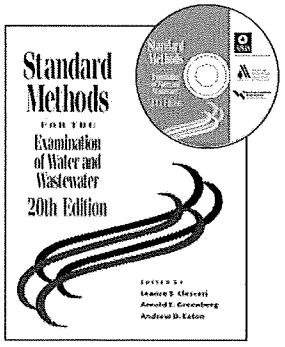

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WW01J7

Response to Comment Letter ADD-G.50
Richard J. Jackson, MD, MPH, FAAP
July 6, 2018

Response to Comment ADD-G.50-1:

The Commenter's opinion is noted for the record and will be provided to the Regional Planning Commission and Board of Supervisors for consideration. This comment does not specifically address the adequacy of the EIR, and no further response is required. Nonetheless, the County notes that the Project has been sited and designed to promote regional "smart growth" planning principles established by the Southern California Association of Governments' (SCAG) 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy and the County's Antelope Valley Area Plan (AVAP) for the purpose of accommodating regional growth projections in a sustainable manner that reduces criteria air pollutant and greenhouse gas emissions and promotes public health while protecting regional open space, Sensitive Ecological Areas and agricultural areas consistent with the AVAP's Rural Preservation Strategy. See Final EIR, response to Comment F.8-20 for further discussion.

Response to Comment ADD-G.50-2:

The Commenter's opinion is noted for the record and will be provided to the Regional Planning Commission and Board of Supervisors for consideration. Please see response to Comment ADD-G.50-1 for further discussion of Project siting and design to promote public health and meet regional planning goals.

Response to Comment ADD-G.50-3:

The Commenter's opinion is noted for the record and will be provided to the Regional Planning Commission and Board of Supervisors for consideration. Please see response to Comment ADD-G.50-1 for further discussion of Project siting and design to promote public health and meet regional planning goals. Indeed, the South Coast Air Quality Management District (SCAQMD) has determined that the Project's Centennial Specific Plan "exemplifies [the County's] leadership in promoting sustainable communities development" and "will help reduce emissions from mobile sources, protect the public health from air pollution, and achieve healthful air in the [South Coast Air] Basin." Final EIR, Comment D.4-2. Please see response to Comment ADD-G.50-1 for further discussion.

With regard to this comment's concerns regarding increased stress levels related to car commutes, please see Final EIR, response to Comment F.8-15, which details the various mandatory actions that the Project must implement to reduce the number of vehicle trips by Project residents and visitors. For example, MM 10-25 requires that the Project's mandatory Transportation Management Association implement transportation measures to ensure that (1) a minimum of 30 percent of total daily internal on-site trips, and (2) a minimum of 20 percent of peak hour external commuting trips are completed by using transit modes other than single-occupancy automobiles.

It is further noted that, while commuting may be associated with some adverse health effects, the same is true with regard to inadequate housing supply. As explained in Final EIR, response to Comment F.8-20, California's housing shortage has reached crisis levels.[3367] Between 1980 and 2010, the construction of new housing units in the Los Angeles metro region fell far behind the national average.[3368] During this period, new housing construction grew by 54 percent in the typical U.S. metro area, whereas new housing units in the Los Angeles metro area grew by just 20 percent.[3369] The result has been skyrocketing housing prices. In 1970, California home prices exceeded the national average by 50 percent.[3370] By 1980, the gap had widened to 80 percent.[3371] As of 2015, the average home price in California exceeds the national average by 250 percent.[3372] California rental prices are no better. Today, the average monthly rent in California exceeds the national average by 50 percent.[3373]

Predictably, the impact of the housing crisis has been hardest on the region's most vulnerable populations. Between 1990 and 2012, poverty levels in the SCAG region have increased by 69 percent, with a quarter of all children living in poverty.[3374] In the Los Angeles metro region, approximately 30 percent of the median household's total income is used to pay housing costs, 7 percent more than the national average.[3375] However, the poorest 25 percent of Los Angeles metro area households spend, on average, 67 percent of their income on housing.[3376] As a result, these low-income households are forced to spend less on other essentials. According to Harvard's Joint Center for Housing Studies, low-income households who spend more than 50 percent of their income on housing also spend 39 percent less on food than do households that spend less than 50 percent of income on housing.[3377] To seriously mitigate California's housing shortage and its disproportionate impact on low income households, California must construct 100,000 additional residential units on top of the 100,000 to 140,000 housing units the state is expected to build annually, and these units must be located almost exclusively in California's coastal metro areas, including Los Angeles County.[3378]

Recent research demonstrates that inadequate housing contributes to a variety of adverse health effects, including infectious and chronic disease, injury, impaired childhood development, poor childhood nutrition, adverse mental health impacts, and people of color and people with low income are disproportionately affected by such adverse effects.[3379, 3380,

[3367] California, State of, Legislative Analyst's Office (LAO). 2015. California's High Housing Costs: Causes and Consequences (p. 28). Sacramento, CA: LAO. http://www.lao.ca.gov/reports/2015/finance/housing-costs/housing-costs.pdf.
[3368] *Id.,* p. 10
[3369] Ibid.
[3370] *Id.,* p. 12
[3371] *Id.,* p. 3
[3372] *Id.,* p. 7
[3373] *Id.,* p. 12
[3374] SCAG 2015, p. 3.14-13
[3375] LAO 2015, p. 25
[3376] *Id.,* p. 26
[3377] *Id.,* p. 27
[3378] *Id.,* pp. 34, 35
[3379] James Krieger, MD; Donna L. Higgins, PhD. May 2002. Housing and Health: Time Again for Public Health Action. American Journal of Public Health, Vol 92. No. 5.
[3380] Xavier Bonnefoy. 2007. Inadequate Housing and Health: An Overview. International Journal of Environment and Pollution, Vol. 30, Nos. 3/4.

[3381] As discussed in Final EIR, response to Comment F.8-43, the Project would significantly contribute to meeting the State-mandated Regional Housing Needs Assessment housing production goals for the unincorporated areas of the County and thus help reduce adverse health effects associated with the exiting housing crisis.

Response to Comment ADD-G.50-4:

The Commenter's opinion is noted for the record and will be provided to the Regional Planning Commission and Board of Supervisors for consideration. This comment does not specifically address the adequacy of the EIR, and no further response is required. Nonetheless, the County notes that the Project has been designed to promote public health, including with regard to pedestrian and driver safety. The Project includes integrated walking and biking facilities to allow for alternative transportation and exercise, and the South Coast Air Quality Management District has found that the Project will protect public health from air pollution, as discussed further in response to Comment ADD-G.50-3. With regard to this comment's concerns regarding the adverse health effects associated with driving, please see response to Comment ADD-G.50-4. This comment assumes that the vehicle trips associated with the Project would not occur but for the Project. This assumption is in error. As explained in Final EIR, response to Comment F.8-20, the Project would accommodate projected regional growth that is going to occur whether or not the Project is constructed. Moreover, as further discussed in Final EIR, response to Comment F.8-20, research demonstrates that, while compact development may reduce driving, the magnitude of that reduction is small, and the correlation between compact development and reduced driving may be particularly small in Southern California where only 7 percent of jobs are accessible by transit. In any case, the adverse health effects associated with driving are likely to be reduced over time as safer autonomous vehicles become more commonplace in California.[3382, 3383, 3384]

Response to Comment ADD-G.50-5:

The Commenter's opinion is noted for the record and will be provided to the Regional Planning Commission and Board of Supervisors for consideration. This comment does not specifically address the adequacy of the EIR, and no further response is required.

Response to Comment ADD-G.50-6:

The Commenter's opposition to the Project is noted and will be provided to the Regional Planning Commission and Board of Supervisors for consideration. With regard to smart

[3381] Jake Elliot. 2014. The Three Housing Problems That Most Affect Your Health. The Guardian, August 8, 2014.
[3382] Grayson Brulte. 2017. The Furturistic Health Benefits of Self-Driving Cars, Thanks to AI. GE Reports. https://www.ge.com/reports/futuristic-health-benefits-self-driving-cars-thanks-ai/.
[3383] Sara Kessler. March 29, 2017. A timeline of when self-driving cars will be on the road, according to the people making them. Quarz. https://qz.com/943899/a-timeline-of-when-self-driving-cars-will-be-on-the-road-according-to-the-people-making-them/.
[3384] Mallory Locklear. 2018. California will allow autonomous cars to pick up passengers. Engadget.com. https://www.engadget.com/2018/06/01/california-allow-autonomous-cars-pick-up-passengers/.

growth, please see response to Comment ADD-G.50-1. This comment does not specifically address the adequacy of the EIR, and no further response is required.

From: terrymgrill@yahoo.com
Sent: Tuesday, July 10, 2018 4:13 AM
To: rruiz@planning.lacounty.gov; jsackett@planning.lacounty.gov
Cc: firstdistrict@bos.lacounty.gov
Subject: Tejon Ranch Development

I am a resident of Los Angeles County and live at 464 W 7th Street in Claremont, CA. I have spent time at the Tejon Ranch and recommend that it remain conserved as open space. This is especially important in Los Angeles County, a park poor region of the United States. While increased access to affordable housing is important in our county, the need is in more central areas, next to public transportation and jobs. I am very concerned about energy consumptions and vehicle pollution from residents having to commute log distances to places of work and increased The Antelope Valley already suffers from some of the regions worst air pollution and the Project will only make poor air quality worse. At the very least the Project should be GHG emissions neutral as was Newhall Ranch. ADD-G.51-1

Please consider approving projects adjacent to public transportation and those that will not put further stress on our already crowded interstate corridor. Please do not approve projects that will increase air pollution and reduce the ability of LA County to meet emissions reduction goals.

Regards,
Terry Grill

Sent from my iPad

Sent from my iPad

Response to Comment Letter ADD-G.51
Terry Grill
July 10, 2018

Response to Comment ADD-G.51-1:

Thank you for your comment and for your participation in this public process. The comment's general opposition to the Project and stated preference that Tejon Ranch be conserved as open space is noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration. As explained on Draft EIR page 4-45, on June 17, 2008, the Tejon Ranch Company entered into a Conservation and Land Use Agreement with various non-profit environmental and conservation organizations which provides for the dedication or sale of conservation easements over approximately 240,000 acres, or approximately 90 percent, of the Tejon Ranch, thus preserving this land as open space in perpetuity.

As this comment correctly notes, there is a significant need for additional housing in Los Angeles County, but this need is not only in more central areas, as this comment suggests. As explained in Final EIR, response to Comment F.8-20, 30,145 new housing units are needed to meet future housing demand in the North Los Angeles County Subregion, which includes Antelope Valley, through 2021, and it is anticipated that this number will grow when the Southern California Association of Governments adopts the next Regional Housing Needs Allocation in Fall 2020.

Regarding the Commenter's general concerns regarding pollution emissions related to vehicle use and energy consumption, please refer to Draft EIR Sections 5.11, Air Resources, and 5.21, Climate Change, which comprehensively analyze the Project's potential impacts related to air emissions and greenhouse gasses. This comment's recommendation that the Project be "GHG emissions neutral" is noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration, although it should be noted that the Project has committed to achieving no net increase in GHG emissions generated by Project electricity use, and that the County proposes to adopt a large number of mitigation measures to further reduce GHG emissions.

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From: brianesquivel35@yahoo.com
Sent: Tuesday, July 10, 2018 12:23 PM
To: jsackett@planning.lacounty.gov
Subject: Sorry it's in all caps, people tend to not listen to what I have to say most of the time.

I DON'T KNOW IF YOU'LL BE READING THIS, I KNOW YOU LIVE A BUSY LIFE AS WE ALL DO. I WOULD LOVE FOR YOU TO HEAR ME SPEAK UP AGAINST WHAT IS GOING TO HAPPEN AT TEJON. BEING A COLLEGE STUDENT THAT SURROUNDS HIMSELF AROUND NATURE AND ALL THINGS PLANTS. THIS WILL VERY MUCH AFFECT NOT JUST ME, BUT ALL OF US. I HAVE DISCOVERED HOW COOL NATIVE PLANTS ARE BY GOING TO NATIONAL PARKS AND OTHER RECREATIONAL PLACES. LOOKING AT TEJON AND READING THAT ITS A GRASSLAND I PUT ON MY PLANT CONSERVATIONIST HAT. I START TO DECIPHER WHAT PLANTS WOULD BE GROWING THERE FROM ESCHOLZIA CALIFORNICA(California poppy used by pollinators for pollen and seed eating birds), ASCLEPIAS FASCICULARIS (milkweed important host plant for monarch butterflies the ONLY plant that they will eat.), ERIGONUM FASCICULATUM (buckwheat feeds pollinators and the California state bird the quail), YUCCA SPECIES, AND OFCOURSE THE WONDERFUL OAK SPECIES. WITHOUT THESE PLANTS YOU'LL BE SENDING A SHOCKWAVE DOWN TO THE MOST TINIEST ORGANISMS AS EVERY ANIMAL AND LIVING BEING BENEFIT FROM THE PLANTS AT TEJON. EVEN US AND I YOU KNOW YOU HAVE PROBABLY HEARD THIS STATEMENT MANY TIMES ALREADY THEY CLEAN THE AIR AND TRAP POLLUTION WITHIN IN THEM. LASTLY, I MAY HAVE NOT CHANGED YOUR MIND, BUT AT LEAST I TRIED AND I KNOW THAT WITHIN YOU, YOU KNOW WHAT IS THE RIGHT CHOICE TO DO SO YOU DECIDE!

ADD-G.52-1

Response to Comment Letter ADD-G.52
Brian Esquivel
July 10, 2018

Response to Comment ADD-G.52-1:

Thank you for your participation in this public process. This comment will be provided to the Regional Planning Commission and Board of Supervisors for consideration. The Commenter's opposition to the Project is noted. The EIR thoroughly analyzes special status plant and oak tree impacts, and proposes mitigation measures to reduce Project-related impacts to special status plants and oaks to a less than significant level. See Final EIR, Appendix 2.0-C.Rev, Mitigation Monitoring and Reporting Program. For further discussion regarding special status plants, see Draft EIR, Section 5.7, pages 5.7-142 to -145; Final EIR responses to Comments F.8-128 to F.8-131. For further discussion regarding oaks and oak woodlands, please see Draft EIR, Section 5.7, pages 5.7-157, -160, -161; Final EIR, responses to Comments A.2-7, B.4-50, B.4-41, and F.8-132 to F.8-135. This comment does not specifically address the adequacy of the EIR, and no further response is required.

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From: Carol Bornstein [mailto:caroljb53@gmail.com]
Sent: Tuesday, July 10, 2018 9:00 PM
To: ExecutiveOffice; SecondDistrict; Rosie Ruiz; jsackett@planning.lacounty.gov
Subject: Centennial Project

10 July 2018

Los Angeles County Board of Supervisors
Kenneth Hahn Hall of Administration
500 West Temple St. Ste 383
Los Angeles, CA 90012
(213) 974-1411
executiveoffice@bos.lacounty.gov
seconddistrict@bos.lacounty.gov

Los Angeles County Regional Planning Commission
Department of Regional Planning
320 West Temple Street
Los Angeles, CA 90012
(213) 974-6411
rruiz@planning.lacounty.gov

jsackett@planning.lacounty.gov

RE: Oppose the City-sized "Centennial" Sprawl Development in L.A. County

Dear Los Angeles County Board of Supervisors, Supervisor Mark Ridley Thomas, and Regional Planning Commission:

I regret that I am unable to attend the upcoming hearing on 11 July to express my concerns about the Centennial project in person. Instead, I am submitting this letter urging the Board and Planning Commission to oppose this ill-conceived and ecologically unsound project. You have ample evidence of the deleterious impacts that would result should this project be approved, including the following:

- Constructing a completely new, non-contiguous community consisting of thousands of homes, commercial, and non-residential development is an example of urban sprawl at its worst.
- The loss of or at best severe damage to a highly significant, biologically diverse landscape that supports many rare and endangered plants and animals.
- The vast amount of fossil fuels that will be consumed by residents of this new community as they commute to established urban areas, adding to the already horrendous traffic problems in the greater Los Angeles Basin.
- Increased air pollution resulting from this additional traffic and the consequent negative impact on human health.

I also question the underlying assumption that our region can accommodate everyone who wants to live here. Where is the water going to come from to support a project of this size? What is the ecological "carrying capacity" of the Los Angeles Basin? If we truly wish to achieve and sustain a healthy - and affordable - quality of life in our region, difficult decisions that limit growth must be made. At minimum, we need to insist upon projects that reflect smart growth principles and thoughtful urban planning. We simply cannot continue to build this kind of ecologically irresponsible development that compromises irreplaceable and increasingly threatened natural resources without doing harm to ourselves and to the environment that sustains us.

ADD-G.53-1

ADD-G.53-2

ADD-G.53-3

Sincerely,

Carol Bornstein
1215 ½ S. Point View
Los Angeles, CA 90035

Response to Comment Letter ADD-G.53
Carol Bornstein
July 10, 2018

Response to Comment ADD-G.53-1:

Thank you for your participation in this public process. The Commenter's opposition to the Project is noted and will be provided to the Regional Planning Commission and Board of Supervisors for consideration. This comment does not address the adequacy of the EIR, and no further response is required.

Response to Comment ADD-G.53-2:

The County disagrees with the Commenter's characterization of the Project, and specifically notes that the Project does not constitute urban sprawl, that Project-related impacts to biological resources are mitigated to the greatest extent feasible, that traffic-related impacts would be substantially reduced with mitigation measure implementation, and that the Project has been sited and designed to protect human health and reduce criteria pollutant and greenhouse gas emissions. For a specific, in-depth refutation of the assertion that the Project constitutes urban sprawl, see Final EIR, response to Comment F.8-20. For more with regard to biological resources and mitigation, please see Draft EIR, Section 5.7; Final EIR Appendix 2.0-C.Rev, Mitigation Monitoring and Reporting Program.

Response to Comment ADD-G.53-3:

The Commenter's opposition to the Project is noted and will be provided to the Regional Planning Commission and Board of Supervisors for consideration. The County disagrees with the Commenter's characterization of the Project. The Project has been sited and designed to promote regional "smart growth" planning principles established by the Southern California Association of Governments' (SCAG) 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy and the County's Antelope Valley Area Plan (AVAP) for the purpose of accommodating regional growth projections in a sustainable manner that reduces criteria air pollutant and greenhouse gas emissions and promotes public health while protecting regional open space, Sensitive Ecological Areas and agricultural areas consistent with the AVAP's Rural Preservation Strategy. See Final EIR, response to Comment F.8-20 for further discussion. With regard to the Project's water supply, please see Draft EIR, Section 5.18, Water Resources, and Final EIR, responses to Comments F.3-4 through F.3-9, and F.8-220.

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1115 Truxtun Avenue, Room 502
Bakersfield, CA 93301

Phone (661) 868-3660
Fax (661) 868-3666
district2@co.kern.ca.us

ZACK SCRIVNER
SUPERVISOR - SECOND DISTRICT

July 18, 2018

David W. Louie, Chair
Los Angeles County Regional Planning Commission
320 W. Temple Street
Los Angeles, CA 90013

RE: Centennial Specific Plan (Project No. 02-232-(5))

Dear Chairman Louie,

Kern County and Northern Los Angeles County share a common focus to bring affordable, well planned housing and sustainable jobs for our residents. As the Supervisor for Kern County's Second District which includes the Antelope Valley portion of Eastern Kern as well as the areas of Interstate 5 of Lebec and Frazier Park into Mettler, Tejon Ranch projects represent an opportunity for carefully planned communities while providing our future generations with permanent conservation areas.

I support the work of Tejon Ranch to implement the Ranch wide agreement that protected over 90% of the ranch while providing for well planned communities such as Tejon Commerce Center, Tejon Mountain Village Specific Plan, Grapevine Specific Plan in Kern County and now the Centennial Specific Plan before your Commission.

The balance of protecting our open spaces and wildlife areas with creating homes for our next generation takes careful planning and thoughtful design. The Centennial Specific Plan will be complementary to the Kern County projects we are already implementing and support economic development in the Antelope Valley.

ADD-G.54-1

Sincerely,

ZACK SCRIVNER
Second District
Kern County Board of Supervisors

Response to Comment Letter ADD-G.54
Zack Scrivner
July 18, 2018

Response to Comment ADD-G.54-1:

Thank you for your participation in this public process. The Commenter's support for the Project is noted and will be provided to the Regional Planning Commission and Board of Supervisors for consideration. This comment does not address the adequacy of the EIR, and no further response is required.

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7/18/18

ADD-G.55

County of Los Angeles
Department of Regional Planning
Hall of Records, 13th Fl. Room 1348
320 West Temple St.
Los Angeles, CA 90012

I'm writing to urge you to oppose the Centennial Project at Tejon Ranch. I believe them untrustworthy as developers in such a unique area for California Flora & Fauna which should result in an absolutely high standard of consideration that should exceeds the current EIR. ADD-G.55-1

A couple points:

Tejon Ranch Conservancy: When many major Environmental Advocacy Groups entered into agreement to no get in the way of the proposed development, one of the stipulations was "significant public access". I can frustratingly report that as a member of the public that is eager to explore one of the most unique areas in the most unique state in the world, there has been no significant public access. For many years, there were months on end without any opportunity for the public to visit any area of the ranch. Often payment was required. When I broached the subject with them, inept claims of 'lack of funding' and pleas of how difficult it is to coordinate access. This is certainly absurd considering how easy it is to access the ranch for commercial filming projects. I'm happy to share my correspondence if you're interested. ADD-G.55-2

Illegal Hunting It should be pointed out that the Tejon Ranch knowingly participated in the Illegal hunting and killing of mountain lions on their property. http://articles.latimes.com/2012/feb/11/local/la-me-0211-tejon-lions-20120211 This is another instance where this company considered their goals above those of the public, and the laws of our state. ADD-G.55-3

While these two issues may not seem significant in the face of such an ambitious project, they illustrate that this organization does not respect the Public and our laws. Couple this with the absolutely unique ecosystems the proposed development would disrupt, an incredibly high standard should be adopted so we don't make a grand mistake that would ruin an irrecoverable area of our fine State. Yes, they'd like to dangle a carrot of additional housing that we need, there are far less destructive ways to meet such goals. ADD-G.55-4

Thank You

Ben Oswald
4223 Portola Ave.
Los Angeles, CA 90032

RECEIVED
2018 JUL 23 AM 9:44
DEPT OF REGIONAL PLANNING

Response to Comment Letter ADD-G.55
Ben Oswald
July 18, 2018

Response to Comment ADD-G.55-1:

The Commenter's opposition to the Project and opinion regarding the Applicant is noted and will be provided to the Regional Planning Commission and Board of Supervisors for consideration. This comment does not address the adequacy of the EIR and, therefore, no further response is required.

Response to Comment ADD-G.55-2:

This comment does not specifically address the Project or the adequacy of the EIR, and no further response is required under CEQA. However, for informational purposes, the County notes that the Commenter is correct that the RWA addresses public access. Section 3.11 of the RWA addresses public access, indicating that the Owner shall provide significant and appropriate access to Tejon Ranch to the public. Section 3.11 of the RWA required the preparation of a Public Access Plan as part of the RWMP, which has been duly prepared, and the Applicant has been implementing the public access plan. See Final EIR, Appendix 5.7-D, Ranchwide Management Plan, Volume 3, Public Access Plan, for more information. Neither the RWA nor the RWMP restricts the Applicant's ability to restrict or manage access to its private property.

Response to Comment ADD-G.55-3:

This comment has been noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration. With regard to illegal killing of mountain lions, it is not Tejon Ranch policy to do so. As indicated in the article referenced by the Commenter, the Applicant has publicly explained that it expresses "deep regret that such incidents took place on ranch property and the company is doing everything within its power to ensure that something like this never happens again." Further, the killings "occurred without the knowledge and/or consent of Tejon Ranch's senior officers." This comment does not address the adequacy of the EIR, and no further response is required.

Response to Comment ADD-G.55-4:

The Commenter's opposition to the Project and opinion regarding the Applicant is noted and will be provided to the Regional Planning Commission and Board of Supervisors for consideration. This comment does not address the adequacy of the EIR and, therefore, no further response is required.

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30 JULY 2018

To: Mr. Jodi Sackett
Los Angeles County Regional Planning Commission
Department of Regional Planning
320 West Temple Street
Los Angeles, CA 90012
jsackett@planning.lacounty.gov

From: Joseph L. Medeiros
Professor Emeritus, Biological Sciences
Sierra College, Rocklin, CA 95677
2018 Conservationist of the Year, John Muir Association

Dear Mr. Sackett,

This note to you is a very sincere plea to relay my wishes to the Los Angeles Regional Planning Commission. It is my hope that they deny the application for Centennial, a new city of enormous proportions in their region of California.

I have spent some marvelous time at the Tejon Ranch, taken aback at the size and grandeur of this rare and near-intact slice of early California. I am 70 years old, grew up in the San Joaquin Valley and have lived in Placer County for nearly thirty. In both locations I observed enormous tracts of biologically productive land, subdivided and transformed by human sprawl. Thousands of acres that will never be seen again, excepting for rooftops and parking lots.

I am not against well-planned and environmentally-conscious growth. But I am strongly against projects that invade the ecological integrity of sensitive remnants of California – especially those of significant size, like the Tejon Ranch.

The Tejon Ranch is already a good example of mixed-use. There, wildflowers can flourish, condors can soar and sportspersons can hunt sustainably. Add to this is a flourishing Conservancy that allows citizens to visit and observe, real-time, a California that is nearly extinct.

As a grandfather who helps sustain his grandchildren with rich and wild experiences of California, I implore you to reject this "camel's nose in the tent" project. Let's think of our grandchildren's grandchildren. Save the Tejon for them!

ADD-G.56-1

Very sincerely,

Joseph L. Medeiros
marmots@pacbell.net
(530) 906-8429 cell

Response to Comment Letter ADD-G.56
Joseph Medeiros
July 30, 2018

Response to Comment ADD-G.56-1:

The Commenter's opposition to the Project is noted and will be provided to the Regional Planning Commission and Board of Supervisors for consideration. This comment does not address the adequacy of the EIR and, therefore, no further response is required. Further, the County disagrees with the Commenter's characterization of the Project. The Project has been sited and designed to promote regional "smart growth" planning principles established by the Southern California Association of Governments' (SCAG) 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy and the County's Antelope Valley Area Plan (AVAP) for the purpose of accommodating regional growth projections in a sustainable manner that reduces criteria air pollutant and greenhouse gas emissions and promotes public health while protecting regional open space, Sensitive Ecological Areas and agricultural areas consistent with the AVAP's Rural Preservation Strategy. See Final EIR, response to Comment F.8-20 for further discussion.

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Stephanie Pincetl
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August 6, 2018

Dear Regional Planning Commissioners

Earlier in July this summer, I participated in a conference of the Association for Public Policy Analysis and Management in Mexico City. Mexico City is about the same population of Los Angeles County, approximately 10 million. One day, I went to visit the pyramids about 20 km north of the city. As we drove out of the basin, we came upon a recently urbanized area made up of hundreds of thousands of slum dwellings converted to permanent housing. There is no public transportation from this area into the city, where there are the jobs. Traffic is terrible as people struggle to get to work in the city, arguably as bad as in LA, air is pollution worse. Like Los Angeles, Mexico City, made up of previously separate villages, is a dense low slung city, struggling to weave itself together with transit in the face of increasing urban expansion in search of cheaper land.

The residents and tax payers of Los Angeles County have repeatedly expressed their commitment to transportation accessible living through imposing sales tax increases on themselves to some of the highest rates in the state. Everyone is concerned about affordability of housing and the need for more housing. Many are also concerned about the rate of transformation of their communities as mega- unit housing complexes are built (replete with parking), reflecting the high transaction costs of infill. Building human scale, affordable, transit accessible housing for all is difficult, not doing so has other consequences, including our inability to house growing numbers of people, including women and children who are now ending up on the street. It also makes development proposals like Centennial, not to mention Newhall, seem self-evident.

Yet a closer look yields very problematic consequences. These include, as my previous letter indicated:

1. Exposing people to extreme heat days, increasing numbers of days of the year.
2. Increasing vehicle miles traveled and the costs associated with vehicle ownership and maintenance, time spent in the car, additional air pollution and added freeway congestion
3. Additional exposure to fire risk due to habitat fragmentation, more roads and habitat transformation
4. Loss of productive grazing lands and open space

ADD-G.57-1

5. Increased burden on stretched state water resources
6. Growth inducing development where there is no existing infrastructure
7. Huge and unquantified need for materials for building and infrastructure – asphalt, concrete, copper, plastics and more.

Let me amplify several of these points, a number of which have been commented upon by other experts and which could be developed in much greater detail that I have sketched here.

ADD-G.57-1 cont.

Energy. Centennial is proposed to be built essentially in the high desert. While the developers may claim zero net electricity by adding photovoltaic panels on roofs of buildings, this does not obviate the need for power in the evening and at night, when the demand is now the highest. In most parts of the region, that 'peak power' and night time load, is generated by natural gas peaker power plants. These are often high-emission peaker plants because larger generators can't operate continuously during the low demand of midday, so the high emission plants step in for the peak load. The slope of the increase to ramp up dictates how quickly resources have to be brought online to meet the increasing net load. Evening peak is likely correspondingly higher under climate change scenarios because there are still cooling needs after the sun sets to compensate for higher heat during the day. Zero net electricity simply refers to the roof top solar generating as much as the building uses in electricity throughout the year, but does not mean there is no need for imported power at peak use times and at night as the electricity generated during the day is unavailable at peak. Centennial is also not proposing full electrification of buildings – no natural gas heating, water heating or cooking, and full electrification of all new commercial and industrial buildings. This is problematic as Centennial will add to both the need for power production and the emissions of pollution and greenhouse gases required for the development. Full electric microgrid energy would be the way to surmount this problem, including, of course, battery storage.

ADD-G.57-2

Transportation. The state is still far from a 100% electric vehicle fleet. Therefore it is indisputable that the development will add to air pollution, probably affecting the southern San Joaquin Valley that already has some of the dirtiest air quality in the state. This means that land development on the Los Angeles county side will have negative impacts on Kern county, externalizing our costs onto others. This is in addition to the traffic burden that will be incurred by this new development. It is delusional to assert that any road widening, traffic signal synchronization or other tweaks will alleviate this fact. We have only to look at the result of the widening of the 405 Freeway. Who will bear this burden? Not the developers, but the residents and commuters/drivers who use the 5 corridor. Private gain, public burden. Perhaps most problematic is that this far flung ex urban development contravenes the intentions of state policy to reduce vehicle miles traveled and to encourage transit accessible communities. Centennial is a legacy development that was included in the General Plan before state policy changed and before there was such vivid evidence of a warming climate, resulting from burning fossil fuels. This development is a poor precedent relative to the county's commitment to a climate sound and sustainable future and certainly makes SB 375 much harder to comply with.

ADD-G.57-3

Fire. As we have seen in this summer's spectacular fire season, suburban developments burn, and they burn badly. Surrounded by open space, most of which has not undergone a regular burning regime, it is likely this area is a tinderbox, waiting for an engine spark, a downed powerline, an escaped ember from an innocent fire, to go up in flames. The costs to the state and to the residents will be high. These fires, as we have seen, are very difficult to contain and are largely correlated to patterns of land development (see https://www.mercurynews.com/2018/08/05/california-wildfires-its-a-people-problem/). A human induced fire in this area could have catastrophic consequences. ADD-G.57-4

Water. Water resources for Centennial are based on provision from the state water project which is already five times over allocated. Robbing Peter to pay Paul is the condition of water allocations in the state for new developments. This aspect should be scrutinized very closely and the county should insist in a zero net water development wherein the developer mitigate through water conservation in other places, any new water use. This needs to be quantified and monitored through record keeping of water billing over time. ADD-G.57-5

Open space. Many write off peri-urban agriculture and grazing as insignificant and therefore disposable. I think this is an error. Such open space lands are important as carbon sinks and are not reproducible; we are not able to make more land, planting trees in the suburban development will not compensate for the loss of this carbon sequestration. There are long term unknown consequences of eliminating potential grazing lands and agricultural lands in our peri-urban region. Uncertainty about trade, about climate impacts, food needs in places from which we are obtaining our food are increasing. Developing our working lands is short sighted. ADD-G.57-6

Infrastructure. Materials flows and the cost of implementing new infrastructure are really never fully accounted for. The cost of developing brand new infrastructure in a place that is not developed is quite significant. It is of an order of magnitude greater than enlarging or improving the infrastructure in the already built environment to address additional residents. The same amount of investment would have a much larger multiplier effect for many more people in the already urbanized area. And it would make the existing historic expenditures go much farther. New development in areas with no existing infrastructure is not an efficient use of resources nor an effective way to amortize all the funds expended in the already urbanized core. Clearly if the county is interested in moving toward greater sustainability, there is a need to begin to think about these issues. ADD-G.57-7

Affordability and urban design. Finally there is the question of affordability and urban design. Only 31% of the population of Los Angeles County can purchase a median priced single family home, this means nearly 70% cannot afford to buy in Los Angeles County. This argues for Centennial to offer a large percentage of its units at affordable rates in order for the development to help address the housing needs of people in the region – 50% affordable? Further, the development ought to include very low cost units for the poor or currently homeless. If indeed, the developers are creating more than a bedroom community, enabling all people to live together at prices that they can afford is a first step, especially since, if one adds ADD-G.57-8

in the costs of commuting to jobs, the affordability of any housing so far away from jobs becomes relative.

ADD-G.57-8 cont.

For Centennial to be a climate appropriate community, plopped as it will be in the high desert, it will need a dramatically different urban form. Narrow streets, light colored roofs, walls and pavement, shaded walk ways, common wall buildings, all are time tested urban adaptations to hot climates. For people to feel like walking anywhere when it is hot, shade is needed, sheltered areas need to be provided. For buildings to be energy conserving and cool, they need to be common wall. The answer is a village like development, as one would find in Greece, southern Italy or other Mediterranean areas. What is being proposed is an entirely inappropriate urban form to the place it is being proposed. An affordable village, supported by good transit links with highly compacted impacts on the land and small infrastructure footprint might be manageable in terms of the sustainability impacts a new development in the middle of nowhere might make. Short of that, the development is simply continuing a well-worn path of car dependent, energy and material intensive suburban development that exposes its residents to risk of heat, fire and disruption. It continues robbing investments in the already developed urban areas, undermining the investments funded by tax payers such a public transportation investments, rendering them ineffectual and ultimately frustrating.

ADD-G.57-9

The commission might consider a set of briefings that shed light on a number of issues pertaining to new developments into the future.

1. What are the likely climate impacts across the county
    a. High heat
    b. Fire incidents
2. What are the likely water availability impacts with decreasing snow pack?
3. The status and activities of the County Clean Power Authority
    a. Microgirds versus grid connected
    b. Constraints on solar due to Rule 21
4. How CO2 emissions mitigation are accounted for:
    a. Zero net electricity
    b. Zero net carbon
    c. Zero carbon
    d. Off sets versus credits
        i. Who are the authorizing/monitoring entities of each
        ii. What are the accountability and enforcement mechanisms
        iii. Large reporters under cap and trade versus land developers
    e. Carbon sequestration by non-urban soils, forests and urban trees
5. Urban heat island effect and its mitigation
    a. Cool roofs
    b. Cool building surfaces
    c. Cool pavements
    d. Cool parking lots
6. Strategies and materials for urban stormwater infiltration
    a. Permeable pavements

ADD-G.57-10

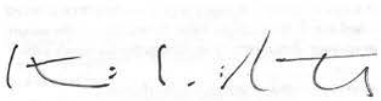
   b. Bioswales
   c. Retaining stormwater on site
7. What are zero net water budgets? How are they established and enforced?
8. Alternative land use strategies
   a. Urban limit lines
   b. Transfer of development rights
   c. Different types of easements
9. How much and where can the county's urbanized area be infilled, at what densities and proximities to transit.
   a. What is the economic effect of reducing parking requirements on development costs?
   b. What are strategies for community parking lots to reduce costs of development?
   c. What are strategies for car share at new developments to mitigate the need for private cars?

ADD-G.57-10 cont.

Only when the RCP has a full range of alternatives and understanding of this rapidly changing regulatory period to deal with housing affordability, climate impacts, water uncertainty and carbon mitigation strategies, including a range of infill options, can decisions of the impact of Centennial be made with certainty.

I would suggest, that given my knowledge of the points above, there are few overriding considerations that make the Centennial development appropriate going forward, other than a general plan designation that reflected the prevailing thinking of the time. Times have changed. Decisions should too.

Respectfully yours



Stephanie S. Pincetl

Response to Comment Letter ADD-G.57
Stephanie Pincetl
August 6, 2018

Response to Comment ADD-G.57-1:

Thank you for your participation in this public process. The Commenter's concerns are noted for the record and will be provided to the Regional Planning Commission and the Board of Supervisors for consideration. This introductory comment provides background information unrelated to the Project and a list of the topic areas addressed in the Commenter's letter. Responses to specific comments on each topic are provided below. No further response is required to this introductory comment, which does not raise specific concerns regarding the EIR.

Response to Comment ADD-G.57-2:

The Commenter misstates the Project's commitment with regard to net zero carbon for the electric sector. As part of the Project's proposed development agreement with the County, the Project has committed to achieving a "net zero carbon for the electric sector" standard on all public and private facilities constructed within the Project, which means that carbon emissions created to produce electricity that is consumed within the Specific Plan area will be offset with an equivalent amount of carbon emission reductions that result from quantified greenhouse gas emission reductions as documented over time as part of each application for a tentative tract map.

The information presented by the Commenter regarding power generation and the Commenter's concern regarding the Project's energy use are noted, and will be provided to the Regional Planning Commission and Board of Supervisors for consideration. The County notes that the EIR appropriately analyzed energy demand and infrastructure requirements specific to the Project and location, and consulted with utility providers to ensure that sufficient energy and infrastructure will be provided for the Project. Electrical service to the Project site is provided by Southern California Edison (SCE), which has transmission and distribution facilities located within and near the Project site as described on Draft EIR page 5.20-7. The Draft EIR acknowledges that the Project would place new demands on electrical service and create the need for new utility infrastructure. (Draft EIR, page 5.20-8) During operations, SCE estimates that all proposed land uses in the Project over a 20-year horizon would generate a peak increase in electricity demand of approximately 165 MW at buildout – this is a conservative assumption that does not take proposed energy efficiency measures into account. (*Id.,* pages 5.20-8, -9.) SCE would serve the Project's demand for electrical service through the existing distribution facilities on the Project site and the utility improvements that are proposed as part of the Project, which are described on Draft EIR pages 5.20-10 through 5.20-12. SCE has indicated that with proposed infrastructure improvements, there would be adequate electrical supplies to serve the Project under peak demand conditions. (*Id.,* page 5.20-9) Further, per MM 20.2-1, the Project Applicant/Developer will coordinate with SCE to ensure that there are no prolonged disruptions to existing transmission lines that extend through the study area, and coordinate

in the design and implementation of future services and facilities, to ensure that service and infrastructure is adequate to serve proposed land uses and are available for the first occupied uses. (Final EIR, page 3-82)

With regard to energy use and Project design, the Project is subject to a myriad of energy efficiency and green development regulations and requirements incorporated into Project design and mitigation measures. For example, the Centennial Green Development Program's Green Building component requires all Project development to comply with CALGreen Code Mandatory Measures and voluntary CALGreen Tier 1 measures, and to comply with the Los Angeles Green Building Ordinances. Additional measures are also included to further improve energy, water, and material management conservation and efficiency, and to assure healthy building materials and walkable/bikable designs. Please see Final EIR, response to Comment F.8-204 for in-depth discussion of this topic.

Response to Comment ADD-G.57-3:

The Commenter's opinions are noted and will be provided to the Regional Planning Commission and Board of Supervisors for consideration. However, the County disagrees with the Commenter's assertions and characterization of the Project.

With regard to the assertion that air pollution impacts will increase from additional vehicles, the lead agency notes that the EIR thoroughly and appropriately analyzes potential vehicle-related air quality impacts from Project implementation, and incorporates all feasible mitigation to reduce impacts, both for temporary impacts from construction vehicles and from long-time operational vehicle use. At Project buildout, in 2035, long-term operational emissions of VOC, NOx, CO, PM10, and PM2.5 would exceed AVAQMD and SCAQMD CEQA significance thresholds, and the primary source of emissions would be from vehicle operations. MMs 11-4 through 11-6 would be implemented to reduce operational emissions; however, the impact would remain significant and unavoidable. It should be noted that the Project's proposed residential and non-residential uses have been planned for a balance between the number of jobs available and the number of on-site housing units in an effort to encourage local trip making. The Project requires establishment of a Transportation Management Association (TMA) that develops strategic linkages with other Antelope Valley/Santa Clarita Valley TMAs or like organizations, to maximize transit efficiencies and services. The TMA would reduce dependence on automobiles and provide for a more efficient use of transportation resources among Project occupants, reducing pollutant emissions. MM 11-10 requires implementation of PDF 11-6, which specifies that residences or other sensitive land uses shall not be built within 150 feet of SR-138. The analysis demonstrates that the incremental cancer risk and chronic non-cancer health risk to sensitive receptors beyond the 150-foot buffer would be less than significant. The analysis also indicates that health risks to existing residents adjacent to SR-138 in the Project vicinity would be less than significant with incorporation of MM 11-10. Further, the Project would not conflict with AVAQMD and SCAQMD air quality management plans (AQMP) because the land uses, population, and vehicle travel elements of the Project are anticipated in the SCAG 2012–2035 RTP/SCS and the Southern California Association of Governments' (SCAG) 2016–

2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), which is the basis for AQMP development.

With regard to the assertion that the Project would impede SB 375 goals and is poor planning, the County disagrees. The Project provides development on a site planned to accommodate projected growth in a manner consistent with regional strategies for achieving mandatory reductions in GHG emissions attributable to the land use sector. The Project has been sited and designed to promote regional "smart growth" planning principles established by the SCAG 2016-2040 RTP/SCS and the County's Antelope Valley Area Plan (AVAP) for the purpose of accommodating regional growth projections in a sustainable manner that reduces criteria air pollutant and GHG emissions and promotes public health while protecting regional open space, Sensitive Ecological Areas and agricultural areas consistent with the AVAP's Rural Preservation Strategy. See Final EIR, response to Comment F.8-20 for further discussion. In fact, the SCAQMD has determined that the Project's Centennial Specific Plan "exemplifies [the County's] leadership in promoting sustainable communities development" and "will help reduce emissions from mobile sources, protect the public health from air pollution, and achieve healthful air in the [South Coast Air] Basin" (Final EIR, Comment D.4-2).

With regard to the assertion that mitigation measures requiring roadway and highway improvements will not alleviate impacts, the County disagrees. The Project EIR thoroughly and appropriately analyzes traffic-related impacts and identifies feasible mitigation. As explained in Draft EIR, Section 5.10, Traffic, Access, and Circulation, under Thresholds 10-1 and 10-2, in accordance with the MMRP, the Project must provide the required funding for the implementation of all identified roadway and highway improvements necessary to reduce Project-related impacts to a less than significant level, either through an agreement with Caltrans (referred to as the Traffic Mitigation Agreement) or by contributing fair share funding for these improvements. If built, improvements identified in the MMRP would fully mitigate all potential Project-related significant impacts to SR-138 and other state highways. However, as recognized in the EIR, Caltrans is legally responsible for implementing planned improvements of State facilities, and the Project Applicant and the County do not have the authority to require that Caltrans do so. For this reason, the EIR concludes that if improvements are not implemented, the Project would contribute to significant and unavoidable impacts. (Draft EIR, Section 5.10, pages 5.10-1, -2, -130) The Commenter provides no evidence for its assertion that EIR analysis is insufficient, and no further response is required.

Response to Comment ADD-G.57-4:

With regard to increased fire risk, the EIR appropriately recognizes potential fire risks and adequately analyzes the impact of introducing urban development, specifically the Project as designed, into an area subject to wildfire, concluding that the Project would comply with regulatory requirements and incorporates mitigation measures that would reduce impacts to a less than significant level. (Draft EIR, Section 5.3, Hazards and Fire Safety, pages 5.3-35 to 5.3-39) As noted in the EIR, the Project site is located in an area designated as a Fire Hazard Severity Zone by the California Department of Forestry and Fire Protection. (Draft

EIR, Appendix 5.19-A, page 5.3-30) The majority of the Project site is either within a Very High Fire Hazard Severity Zone (VHFHSZ) or High Fire Hazard Severity Zone (HFHSZ), while the eastern edge of the Project site is within the Moderate Fire Hazard Severity Zone (MFHSZ). (Final EIR, page 3-103) The Draft EIR determines that, with implementation of MM 3-9, Project impacts related to fire hazards would be less than significant under the applicable thresholds of significance. This determination, however, does not rely solely upon implementation of MM 3-9 or other mitigation measures. Rather, the Draft EIR concludes that Project impacts related to fire safety would be less than significant only after taking into consideration (i) Project site access, (ii) Project site water flows, (iii) Project site topography, (iv) Project site vegetative cover, (v) existing and proposed regulatory controls, (vi) existing mutual aid agreements between federal, state, and local fire safety service providers, and (vii) Project improvements and mitigation measures related to landscaping and vegetation management, building construction, circulation, public utilities, and fire protections services, including but not limited to MM 3-9. For further discussion, see Draft EIR, pages 5.3-35 to -39; Final EIR, responses to Comments F.8-63 and F.8-64.

With regard to the space between Project development and open space, the Project is required to implement fuel modification to comply with State and County regulations. Per MM 3-9, the Project must prepare and implement a Fuel Modification Plan to be reviewed by the LACFD Forestry Division, whose major components will ensure a minimum 20-foot setback from the edge of any structures; an irrigation and transition zone from 20 to 100 feet away, and native brush thinning zone between 100 and 200 feet away from structures. Some Project development is proposed in areas that would be adjacent to large open spaces areas with moderate vegetative cover. Under existing conditions, the plant communities that make up this cover are highly combustible and would therefore present a high fire hazard and pose a potentially significant impact to development in these areas. As development of the Project site proceeds, however, fire hazards associated with the natural vegetative cover would be eliminated through its replacement with urban landscape vegetation, which is irrigated and less combustible than the existing vegetation. (Draft EIR, page 5.3-36) For further details of fuel modification requirements, please see Draft EIR, Section 5.3, and Final EIR, responses to Comments A.2-6, F.8-63, and F.8-64.

Response to Comment ADD-G.57-5:

The Commenter's opinion regarding the reliability of the State Water Project was heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. However, the County disagrees and concludes that Project EIR analysis demonstrates reliable and sustainable water supplies, including with regard to water from the State Water Project. After thorough analysis, the EIR appropriately concludes that Project water supplies will sustainably meet buildout potable and recycled water demands and would in fact maintain an average annual reserve supply in the two Project water banking facilities of more than 79,000 acre-feet after buildout has been achieved. This surplus would persist over time based on an 82-year hydrologic period of record, including single-dry and multiple-dry years, and taking account of potential climate change impacts. With regard to the reliability of imported water supplies for the Project, the potential delivery reliability and variability of Project State Water Project supplies is discussed in Draft EIR Section 5.18,

Water Resources, pages 5.18-20 to -28 and -54 to -64. The analysis of Project imported water supplies uses the Early Long Term scenario also used in the California Department of Water Resources' State Water Project Delivery Capability Report, and incorporates the effects of the most severe droughts during the 82-year historical record, plus additional adjustments to account for potential climate change effects and the 5 percent single-dry year delivery level used by the Antelope Valley-East Kern Water in the Agency's 2015 Urban Water Management Plan. Consequently, the Draft EIR includes a discussion of State Water Project delivery reliability that is consistent with the conservative Early Long Term scenario developed in the Delivery Capability Report and the same scenario, with a reduced single dry year reliability level, used in the Antelope Valley-East Kern Water Agency's 2015 Urban Water Management Plan. Commenter provides no evidence to dispute EIR analysis, and no further response is required.

Response to Comment ADD-G.57-6:

With regard to carbon sequestration and existing vegetation, as this comment correctly notes, the Project would result in the conversion of some vegetative cover that currently sequesters carbon, as disclosed and analyzed in Draft EIR Section 5.21, Climate Change (pages 5.21-5, -50). It should be noted, however, that the Project would plant an estimated 35,123 new trees, as required by the County Tree Planting Ordinance, which would result in an estimated long-term sequestration of 24,867 metric tons of carbon dioxide equivalent, as discussed on Draft EIR page 5.21-83. The Commenter's opposition to this approach is noted and will be provided to the Regional Planning Commission and Board of Supervisors for consideration. However, the County notes that the Project is consistent with County requirements.

With regard to the conversion of agricultural lands, the Commenter's opinion is noted and will be provided to the Regional Planning Commission and Board of Supervisors for consideration. However, the County notes that the EIR thoroughly and appropriately analyzes impacts to farmland. For a detailed discussion, see Final EIR, responses to Comments F.8-182 through F.8-185. Further, the Project represents the culmination of a long-term, comprehensive regional and local planning process designed to accommodate projected growth in the Antelope Valley while also protecting the Antelope Valley's valuable open space and agricultural resources.

Response to Comment ADD-G.57-7:

The Commenter's preference for revitalizing existing communities and infrastructure and building the Project in an infill location to reduce costs is noted and will be provided to the Regional Planning Commission and Board of Supervisors for consideration. The economic cost of the Project is purely a socioeconomic impact not related to adequacy of the EIR. CEQA Guidelines § 15064(e). Nonetheless, the County notes that the Project will provide significant net economic benefits to Los Angeles County, including expected annual revenues of $43,394,902.00 versus $21,827,596.00 of annual costs to the County's General Fund for reoccurring public services, representing an annual net benefit to the General Fund of about $21,567,306.00. The Project will also generate an estimated $22,328,502.00 of property tax

revenues. Further, an estimated 23,675 permanent jobs would be created by Project uses, with about 25,000 construction jobs. See the Draft Statement of Overriding Considerations[3385] for further discussion. The Project and the construction of related infrastructure will be appropriately funded, and it is specifically a Project objective to "Ensure that all Project site infrastructure and public services are funded by the Project to avoid creating any financial obligations on existing residents and other taxpayers." (Draft EIR, page 4-4) To provide just two examples of how the Project will carry out this objective:

- The proposed Centennial Transportation Improvement Program Agreement provides a mechanism for transportation-related improvements to be implemented by providing advance funding for planning, design, and construction of certain improvements and establishing a funding program to collect fair shares for other improvements. (Draft EIR, page 7-19)
- As discussed in Specific Plan Appendix 2-C, the Project Mobility Plan requires the formation and funding of a TMA to promote, manage, and monitor transit and mobility services and infrastructure prior to the issuance of the first occupancy permit for the Project. (Final EIR, page 2-503; Final EIR, Appendix 2-C to Appendix 4.0-A)

The Project is not incompatible with the use of infill parcels for multi-family development. While the lead agency acknowledges the benefits of infill development, the EIR extensively documents the sustainable and walkable nature of the Project, and clearly explains that the Project represents the culmination of a long-term, comprehensive regional and local planning process designed to accommodate anticipated growth in the Antelope Valley while also protecting the Antelope Valley's valuable open space and agricultural resources. The Project has been situated and designed to promote regional "smart growth" planning principles established by the SCAG 2016-2040 RTP/SCS (per SB 375) and the AVAP for the purpose of sustainably accommodating regional growth projections in a manner that reduces pollutant and GHG emissions and promotes public health. (Draft EIR, pages 4-3 to -15; 5.8-1 to -11, -19 to -74; 5.9-1 to -21, -23 to -31; 8-4) Further, as part of the Project's overall transportation demand management (TDM) strategy to reduce the dependence on the private automobile, which would result in a consequential reduction in overall volume of Project-generated trips off site, the Project Applicant will be required to participate in or form a Transportation Management Association (TMA) to serve the residents and employees of businesses within the Project area or will be organized in conjunction with an existing organization in the Antelope Valley or Santa Clarita area. Regional and local agencies report successful implementation of the types of TDM measures that the TMA would consider to meet the standards set forth in MM 10-25, and which are listed in Table 2-C-2 of the Specific Plan's Mobility Plan (Appendix 2-C to Final EIR Appendix 4.0-A.Rev). For further discussion, please also see Final EIR, responses to Comments F.8-20 and F.8-72 (in-depth refutation of the assertion that the Project is "sprawl"), and F.8-204 (in-depth discussion of the Project's walkable and sustainable design and features).

[3385] Available at http://planning.lacounty.gov/assets/upl/case/sp_02-232_pm060022-20180711-attG4.pdf.

Response to Comment ADD-G.57-8:

The Commenter's request for more affordable housing in the Project is noted and will be provided to the Regional Planning Commission and Board of Supervisors for consideration. The Project is designed to create a complete and balanced community, with appropriate infrastructure and services to be provided, and a mix of housing types affordable at different price points. With regard to affordable housing details, please see the Affordable Housing Implementation Plan in the Specific Plan, at Final EIR, Appendix 3-C to Appendix 4.0-A.Rev. This comment does not address the adequacy of the EIR, and no further response is required.

Response to Comment ADD-G.57-9:

The Commenter's assertion that a different Project design is necessary to reduce energy use and meet climate goals is noted. However, the County disagrees. With regard to sustainability and County goals, see response to Comment ADD-G.57-7. With regard to energy use and Project design, the Project is subject to a myriad of energy efficiency and green development regulations and requirements incorporated into Project design and mitigation measures. For example, the Centennial Green Development Program's Green Building component requires all Project development to comply with CALGreen Code Mandatory Measures and voluntary CALGreen Tier 1 measures, and to comply with the Los Angeles Green Building Ordinances. Additional measures are also included to further improve energy, water, and material management conservation and efficiency, and to assure healthy building materials and walkable/bikable designs. Please see Final EIR, response to Comment F.8-204 for in-depth discussion of this topic.

With regard to the note that common wall buildings reduce energy use and the Commenter prefers such development, the County notes that the Project has been designed to maximize energy efficiency. The Project incorporates multi-unit and townhome residential buildings in appropriate locations but provides a wide range of housing types to address the state's shortfall of about 3.5 million units needed by 2025 in both affordable and market rate housing.[3386] With regard to the preference for investments in existing communities, please see response to Comment ADD-G.57-7.

Response to Comment ADD-G.57-10:

The Commenter suggests that the Regional Planning Commission seek to receive briefings on a wide range of topics, to inform development decisions. This suggestion and the Commenter's opposition to the Project are noted and will be provided to the Regional Planning Commission and Board of Supervisors for consideration. The County notes that for this Project, the EIR thoroughly and appropriately analyzes all potential impacts on the environment, and mitigates them to the largest extent feasible, as required by CEQA. Further, the County disagrees with the Commenter's characterization of the Project, which has been sited and designed to meet smart growth goals and to be consistent with the AVAP approved

[3386] McKinsey Global Institute, A Tool Kit to Close California's Housing Gap: 3.5 million Homes by 2025, October 2016. Available at: https://www.mckinsey.com/featured-insights/urbanization/closing-californias-housing-gap. Last accessed July 3, 2018.

in 2015, as further discussed in Final EIR, response to Comment F.8-20. This comment does not directly address the adequacy of the EIR, and no further response is required.

From: DAVID SWANSON <davidrsw@msn.com>
Sent: Wednesday, August 8, 2018 11:05 AM
To: Jodie Sackett
Subject: Centennial Specific Plan Project

Dear Mr. Sackett:

I have concerns regarding the Centennial Specific Plan Project's EIR, Specific Plan, GPA, Zone Change, CUP and Tentative Parcel Map for the project. ADD-G.58-1

My overriding concern regarding the Centennial development is the degradation of the night skies, which is bound to happen when such a large development is situated in some of the last remaining dark skies in Los Angeles County. I fully support the building of the city. The location is a perfect place for a new city.

The proposed project is just 3.5 miles from my Pine Grove Ranch on Pine Canyon Road. I partially chose this ranch location years ago because of the dark skies and very little human light pollution. In addition, astronomers from Los Angeles, Ventura and Kern Counties use the Mt. Pinos area for astronomical observing in relatively dark skies. Over the years, light pollution has brightened the skies. Further degradation of the night skies can be avoided by some simple Centennial Project modifications.

I would urge the County to impose the strictest possible controls on the proposed development to minimize light pollution. Among the conditions of approval should be a requirement to use only full cutoff fixtures, use the lowest possible illumination levels, use of timers and motion sensors to shut off lights when not needed (is it really necessary that a parking lot must be lit all night long)? Also, no light fixture should allow light to radiate above the horizon. Billboard signs would be an example of what to avoid. ADD-G.58-2
In addition to the quantity of lighting, the quality of the lighting should also be considered. Harsh, glare producing LEDs, which output much of their illumination in the blue end of the light spectrum, are not only bad for people and wildlife but also astronomy. Low pressure sodium lights are the best astronomically speaking because their output is within a narrow wavelength, which astronomers can more easily filter out. Lights that output in multiple wavelengths are more difficult to filter out.

For more guidance on the best practices in minimizing light pollution, please follow the recommendations of the International Dark Sky Association ("IDA".) The mission of the IDA is to promote quality lighting and reduce light pollution. Please see the information at this link: http://www.darksky.org/lighting/

Wildlife, people, and astronomy all suffer from light pollution. Fortunately this light pollution can be avoided if proper planning is incorporated into this new development. With the Centennial Project in the planning stages, the time is perfect for getting it right the first time. ADD-G.58-3

Thank you for the opportunity to express my concern.

Dr. David Swanson
Pine Grove Ranch
Three Points, CA

Response to Comment Letter ADD-G.58
David Swanson
August 8, 2018

Response to Comment ADD-G.58-1:

Thank you for your participation in this public process. The Commenter's concern about the Project is noted and this comment will be provided to the Regional Planning Commission and Board of Supervisors for consideration. This comment does not address the adequacy of the EIR and, therefore, no further response is required.

Response to Comment ADD-G.58-2:

The Commenter's general support for development of the Project in its location is noted and will be provided to the Regional Planning Commission and Board of Supervisors for consideration. The Commenter's specific suggestions for light-related conditions of approval is also noted and will be provided to the Regional Planning Commission and Board of Supervisors for consideration. However, the County notes that the Project EIR has appropriately analyzed light and glare impacts and identified appropriate mitigation to reduce them to the greatest extent feasible. The EIR discloses that the Project would cause new sources of light and glare during construction activities and during Project operation. With regard to construction activity impacts, motorists on SR-138 could be affected by light and glare from construction of new structures adjacent to it, which would be a significant impact absent mitigation. (Draft EIR, page 5.13-26) Therefore, MM 13-5 requires that security lighting at the construction equipment and building material staging areas be directed away from roadways and existing residences, and that it be screened and directed away from on-site residences that have been occupied as each development phase is built. (*Ibid*.) This security lighting would also be limited and temporary in nature. With MM 13-5 incorporated, construction-related impacts would be less than significant. (*Ibid*.)

With regard to long-term, operational light and glare, the Commenter is correct that the Project would introduce new light and glare sources into the Project site that would result in nighttime lighting and glare, and nighttime sky glow. (*Ibid*.) Nighttime sources of light would include streetlights, vehicle headlights, and lights used in an around buildings, parking lots, parks, and walking paths located on the Project site. (*Id*., page 5.13-27) These outdoor lighting sources would also cause increased sky glow in the area. (*Id.,* pages 5.13-27, -28) To reduce the above-identified impacts, PDF 13-3 has been incorporated into the Project and all feasible mitigation has been identified and is required in MMs 13-2 and 13-6. PDF 13-3 and MM 13-2 require the implementation of detailed components of the Green Development Program listed on Draft EIR pages 5.13-29 and 5.13-30. MM 13-6 requires the preparation of an Exterior Lighting Plan in coordination with a qualified Biologist to minimize impacts, review by an Electrical Engineer, and approval by the County prior to the submittal of each building permit. (*Id*., page 5.13-31) It would apply to all proposed structures and to all development areas that border natural open space resources, and must include, at a minimum, the elements listed on Draft EIR page 5.13-31.

The requirements of MMs 13-2 and 13-6 are consistent with Los Angeles County's Rural Outdoor Lighting District Ordinance, enacted in 2012.[3387] In developing the ordinance, the County considered community input, reviewed the requirements of other successful jurisdictions, and incorporated relevant parts of the Model Lighting Ordinance created over the course of seven years by the International Dark Sky Association and the Illuminating Engineering Society of North America.[3388] The ordinance was established to permit the reasonable use of outdoor lighting for nighttime safety, utility, security, productivity, and enjoyment while promoting dark skies for the enjoyment and health of humans and wildlife.[3389] The County duly conducted an environmental review of the ordinance under CEQA, concluding that its implementation would not have a significant impact on the environment, but rather would reduce existing impacts because outdoor light was not being consistently regulated in much of the County. Despite the incorporation of these measures, the Project site is currently an undeveloped area with few existing light sources, and it is not possible to fully mitigate the impacts of introducing new sources of nighttime light and glare from the Project. The Draft EIR therefore concludes that the impact would be significant and unavoidable. (Draft EIR, page 5.13-29)

Response to Comment ADD-G.58-3:

With regard to the Project's light and glare impacts, please see response to Comment ADD-G.58-2. Specifically, with regard to wildlife impacts due to lighting, this is fully addressed in Section 5.7, Biological Resources, of the Draft EIR. Draft EIR page 5.7-141 recognizes that indirect impacts on biological resources as a result of Project implementation may include "increased lighting and glare effects on wildlife species in the remaining and adjacent open space areas…" Implementation of MMs 13-2 and 13-6 from Section 5.13, Visual Resources, of the Draft EIR, which require the Project Applicant to develop a Lighting Plan to reduce potential impacts to biological resources caused by light and glare, would reduce the level of the impact. The Lighting Plan, also referred to as the Dark Sky Plan, shall be consistent with County lighting standards and shall provide guidelines for outdoor lighting that will be used throughout the Project site. Final lighting orientation and design shall be approved by the County of Los Angeles Department of Building and Safety. This measure will reduce the impact of light and glare on wildlife to a level considered less than significant.

[3387] Los Angeles County Department of Regional Planning (LACDRP). 2017 (accessed October 2). Rural Outdoor Lighting District Ordinance. Los Angeles, CA: LACDRP. http://planning.lacounty.gov/view/rural_outdoor_lighting_district_ordinance/.

[3388] Los Angeles County Department of Regional Planning (LACDRP). 2011. Staff Report to the Regional Planning Commission re: Project No. R2011-004-25-(1-5) Case No. RADVT20100006/ENV Case No. T201100135, Amendment to Title 22 (Zoning Ordinance) Regarding Proposed Rural Outdoor Lighting District Ordinance (pp. 3, 8). September 8, 2011. http://planning.lacounty.gov/assets/upl/data/ord_outdoor-lighting-rpc-package.pdf

[3389] *Id.,* p. 8

From: Kathleen Trinity <ktrinity46@gmail.com>
Sent: Saturday, August 18, 2018 3:59 PM
To: Jodie Sackett
Subject: Centennial Project Comment
Attachments: Kathleen Trinit7.docx, Written Comment to LA County on Centennial, 8-16-2018.docx

Dear Mr. Sackett:

Attached is my comment on the Centennial Project at the Tejon Ranch. It is intended for the Planning Commission to be read before August 29, 2018. Mr. Louie had requested written comment for that meeting a week in advance. ADD-G.59-1

Thank you,

Kathleen Trinity

Kathleen Trinity

August 18, 2018

Mr. Jodie Sackett
County of Los Angeles
Department of Regional Planning
Hall of Records, 13th Floor, Room 1348
320 West Temple Street
Los Angeles, CA 90012
jsackett@planning.lacounty.gov

Dear Mr. Sackett:

Having read Sections 5.7, Biological Resources, 3.0, Setting, and 7.0, Cumulative Impacts of the 2017 DEIR, and Volumes 1 and 2 of the FEIR for the Centennial Project Tejon Ranch, as well as various other pages in other sections, I note the serious failure to address the habitat, foraging/ hunting, life history requirements, and movement/linkages needs of large mammals, especially of the California Mountain Lion. While such needs of the pronghorn antelope, mule deer, and bobcat, are also woefully under addressed, the California Mountain Lion is mentioned only three or four times, and with only a phrase or sentence at most. There is no mention of the California Mountain Lion in Table 5.7-2 either. Given that 1) Tejon Ranch has a poor history of illegally permitted taking of mountain lions (see the LA Times, February 12, 2012), 2) mountain lions require extensive roaming space and linkages, 3) open space has been increasingly fragmented and degraded , and 4) manmade structures such as the California Aqueduct, the I-5 freeway, and the SR 138 (to be expanded into 6 lanes) present large mammals with impassible or dangerous barriers to crucial movement, there is no excuse for the DEIR and the FEIR to avoid a specific and thorough description and assessment of the needs of this animal. This is a serious deficiency of description, assessment, and plan, and dictates that the Project should not proceed.

ADD-G.59-2

Section 5.7 states that wildlife linkages are vital for population maintenance, genetic exchange, escape during catastrophic events, and travel to pursue food, water and resources (5.7-52). Large species such as deer, bear, bobcat, and mountain lion belong to "high mobility guilds," and require "relatively large home ranges..." (5.7-51 and 5.7-53). Mountain lions are "expected to occasionally forage at lower elevations, including the Project site," (5.7-50). In fact, as the DEIR acknowledges "immediately north of SR 138 and east of the Aqueduct on the Project site (which) may serve as a valuable foraging resource area....Tracks of mountain lion, bobcat, black bear...were observed along this drainage," (5.7-63). Thus we can see that while "the Tehachapi Mountains east and north of the I-5

ADD-G.59-3

represent an area that is sufficiently extensive and open (with a few current barriers to movement)" (5.7-53), California mountain lions, bears, bobcats, gray foxes, antelope and mule deer still need a broader home range, and parts of the Project site are included in this home range. It is perplexing then, when 5.7 asserts that a large urban development "of such density that only limited movement corridors are an option, designs that separate development from open spaces by hardened edges" are the "preferred design strategies," (5.7-54). This assumes that the project, especially one of such overwhelming scale, is appropriate for this natural area and its large range-requiring wildlife. This is especially perplexing when the DEIR rightly claims that "Wildlife and plant diversity is nearly always enhanced by the maintenance of naturally occurring open space linkages in the face of land development, (5.7-54)." The argument posed by the DEIR seems to be that because there are at least some sizable manmade barriers to wild life movement on the Project site, and some natural but constrained linkages that can be deemed dead ends or deleterious, then none of the area within the project site is worth preserving for wildlife that might wish to pass through or use the area. A second reason given by the DEIR (5.7.-53, -54) is that most species, because they are specifically adapted to the differing ecosystems of the region, will not traverse into or over the Tehachapi Mountains (5.7-56). While this is true for many species, especially guilds of smaller stature, this is not true of mountain lions, deer, bobcats or coyotes. Residents in the San Gabriel Mountains can attest to the movement of mountain lions, deer, bobcats or coyotes, on local valley floors realize that these animals require access that can accommodate their movement to the valley and into other mountain ranges. A third reason given for allowing the Project site to take over open space and therefore some linkages is that most species not adapted to sparse vegetation and the topography of the eastern portion of the site will not use it very often. Again, portions of the eastern site have been used by mountain lions and other large wildlife, and it is not as if they -can be pointed to other linkages farther west at a given time. Appendix F (F-26: Mountain Lion) acknowledges the area near the SR 138 as "part of the "species range," but the DEIR dismisses this wildlife resource since "this species is known to occur throughout much of the region both on- and off- the Project site." Current knowledge ("Southern California mountain lion's genetic connectivity dangerously low," June 15, 2017, UC Davis) recognizes the dangers of isolation and ensuing loss of genetic diversity among many mountain lion populations in southern California. While it is absolutely necessary for there to be a large linkage in the foothills of the Tehachapi mountains to the north of the project site, this is not a reason to take away the area from north of SR 138 in order to construct the Project.

ADD-G.59-3 cont.

ADD-G.59-4

Section 5.7-51 to 5.7-53 points out that the Project region contains many natural and manmade features which contribute to a large degree of isolation and narrow landscape linkages,"(5.7-53). The manmade features are the formidable barriers of 1) the California Aqueduct, 2) the I-5 Freeway, and 3) the SR-138, slated for expansion into a 6 lane freeway. The DEIR 5.7-53 to -54 argues that "very few species in the project region tend to move across open or otherwise exposed landscape area" unless compelled because of adaptions to specific habitat features and topography, but large or high mobility species such as deer, bobcat, and mountain lion are expected to be able to cross from the Tehachapi Mountains to the western San Gabriel Mountains. The DEIR rightly points out the inadequacy of current narrow and dangerous opportunities for crossings at four locations, seriously constrained by tall chain link fences, barbed wire, proximity to or necessity of crossing the SR-138 (slated for expansion to a 6 lane freeway), and/or proximity to the I-5 near the Aqueduct. There have been a few suggestions for underpasses and overpasses, especially at the I-5 and the Aqueduct, but these appear to be few and small in size. Without advance planning, it is impossible to say that wildlife will be cognizant of various options in all situations. The DEIR further states that the Biological Resources Assessment of SEAs "does not reference any studies that demonstrate that the project site serves a significant element of the regional landscape linkage," (5.7-57). However, absence of studies is not disproving of the need for linkages on the project site, especially given the number of impassible manmade and other barriers on the project site.

ADD-G.59-5

Finally, the DEIR acknowledges "some losses of areas that may be used for foraging and/or breeding of these species (5.7-166)," (larger wide ranging species references 5.7-165). It also acknowledges that Project implementation would increase barriers to movement and that "substantial increases in truck traffic at the SR-138 crossing due to the realignment of Cement Plant Road to intersect with SR-138 immediately adjacent to the potential local wildlife crossing point at the SR-138 (location 4, Exhibit 5.7-6)." This follows the discussion of pronghorn antelope (FEIR 2-145), but equally applies to mountain lion and other large, free roaming wildlife that use both heavy shrub and conifer areas as well as grasslands. If it has been shown that there is a very large wildlife corridor north of the project site and south of the Tehachapi Mountains, then that does not mean that considerable portions of the project site are not important to large, wide ranging wildlife, especially at differing time and seasons. Once again, they have been found at the site and are expected to be found there. One corridor, however large, will not meet the immediate needs of all large wildlife. Additionally, the presence of the I-5 and the California Aqueduct should make preservation of the Project site's open spaces and linkages as parts of the home range even more important, not less. So, while it is true that narrow and dangerous passages exist near

ADD-G.59-6

the I-5, the Aqueduct, and the SR-138, how much greater is the need to find solutions for wildlife crossings and linkages that are generous and safe. The argument that the project site "is not expected to interfere with a majority of regional wildlife movement," (5.7-165) because "the majority of the site is grassland and does not support the forest and shrub cover that many larger, wide-ranging species tend to use during movement episodes," could not refer to mountain lions. Mountain lions typically cross out of these areas and into grasslands often.

ADD-G.59-6 cont.

California wilderness and its wildlife are an invaluable treasure for Californians and for the world's visitors. Wildlife faces ever increasing threats from development, pollution, climate change, and loss of habitat. Our beautiful wilderness should not be allowed to deteriorate and fragment into isolated pockets. It has been said that Los Angeles County needs additional housing, and indeed it does. However, considering that the Centennial project would include commercial and industrial elements along with massive infrastructure for more than 57,000 residents and even more people coming into the area for work, services, or recreation, then one has to ask if this massive development should not be constructed elsewhere. A great number of people who need housing will not have access geographically or financially to the type of housing that will be offered at Centennial. Thus, if we weigh the precious treasure which includes what many would consider less than valuable in resources, but valuable for its wild inhabitants, and which acts as a natural buffer for "richer" open lands, against such a massive urban project, then it is clear that the gem of wilderness is far more valuable than the commercial value of such a project. Once this area is removed for construction, it will be removed forever. We cannot ask our wildlife to adapt to the unadaptable. When we remove their habitat and linkages, even if other areas are preserved, we remove what they currently use and need forever. The price is not worth paying.

ADD-G.59-7

Response to Comment Letter ADD-G.59
Kathleen Trinity
August 18, 2018

Response to Comment ADD-G.59-1:

Thank you for your participation in this public process. These comments are noted and will be provided to the Regional Planning Commission and Board of Supervisors for consideration. This introductory comment does not address the adequacy of the EIR and no further response is required.

Response to Comment ADD-G.59-2:

The Commenter's concerns about habitat loss are addressed in Final EIR responses to Comments F.8-107 and F.8-108, and discussions about foraging/hunting of large mammals are addressed on pages 5.7-50, 5.7-63 and 5.7-64 of the Draft EIR. Life history requirements of large mammals such as the mountain lion, while not discussed for specific species, is a topic covered in the movement discussion on pages 5.7-56 through 5.7-64 of the Draft EIR, and concerns about wildlife movement/linkages are addressed on pages 5.7-56 through 5.7-64 of the Draft EIR as well as responses to Comments B.4-56, B.4-57, F.5-13, F.7-21, F.8-109, F.8-110, and F.8-168 of the Final EIR.

Additionally, pronghorn antelope are discussed at length in responses to Comments B.4-35 and B.4-36, B.4-37, F.8-165 F.8-166, and F.8-167 in the Final EIR. The mule deer and bobcat are discussed as expected to occur (or were observed on the Project site) in the Draft EIR on page 5.7-50; and are mentioned in the wildlife movement section on pages 5.7-56 through 5.7-64 of the Draft EIR. A specific thorough discussion of these two species was not warranted due to their status as common wildlife (not formally "special status" species); however, they are considered in the wildlife movement section on pages 5.7-56 through 5.7-64 of the Draft EIR. As noted in the Draft EIR, potentially significant impacts to wildlife movement and habitat for general wildlife that would result from implementing the Project would be reduced to less than significant levels with implementation of MMs 7-14 through 7-18.

The Commenter's concerns for the mountain lion are noted. The Draft EIR lists special status species in Table 5.7-8. Special status species are defined on page 5.7-88 of the Draft EIR as those species that are State- and/or federally listed as Endangered, Threatened, or Candidate Species; or those species formally considered to be "of concern" by the CDFW.[3390] The formal status of the mountain lion, as listed by CDFW is "specially protected species". This status was initiated by Proposition 117 in 1990, making mountain lion hunting illegal in California, and is not related to rarity or habitat loss. The following paragraph regarding mountain lion status in California can be found on the CDFW website:

[3390] The Yuma mountain lion (Felis concolor browni), is listed by CDFW as a Special Status Species; however, the range of the Yuma mountain lion does not overlap that of the Project site.

Mountain lions are not threatened nor endangered in California. In fact, the lion population is relatively high in California and their numbers appear to be stable. Mountain lions are legally classified as "specially protected species". This has nothing to do with their relative abundance and does not imply that they are rare.

Because the mountain lion is not considered a special status species that should be added to Table 5.7-8, direct impacts to the mountain lion and impacts to mountain lion habitat do not warrant lengthy discussion in the Draft EIR As mentioned above for the mule deer and bobcat, impacts to the mountain lion are considered as part of the wildlife movement discussion on pages 5.7-56 through 5.7-64 of the Draft EIR.

With regard the historic taking of mountain lions, see response to Comment ADD-G.55-3. With regard to wildlife linkages, and potential barriers to those linkages (e.g. SR-138), refer to Draft EIR pages 5.7-52 through 5.7-64 and 5.7-164 through 5.7-166, as well as Final EIR response to Comment F.5-13.

Response to Comment ADD-G.59-3:

The Draft EIR discusses the appropriateness of discouraging wildlife from entering into developed areas. As stated on page 5.7-54 of the Draft EIR, "constrained landscape linkages may subject wildlife to higher mortality from edge effects and increased contact with humans, and constraints on the linkage can result in lower (not greater) likelihoods of regional persistence. In most circumstances, open space linkages within development, especially linear narrow corridors, have not been shown to enhance survival of the species that are most in need of conservation attention. In development adjacent to wildlands, where development is of such a density that only limited movement corridors are an option, designs that separate development from protected open spaces by use of hardened edges are the preferred design strategies (MacArthur and Wilson 1967; Soule 1987; Harris and Gallagher 1989; Bennett 1990)." In summary, the Draft EIR recognizes the advantages of appropriately designed wildlife corridors (e.g. not "linear/narrow").

Neither the Draft EIR nor the Final EIR make the argument that "none of the area within the Project site is worth preserving for wildlife that might wish to pass through our use the area". On the contrary, Section 5.7, Biological Resources, and Section 7, Cumulative Impacts, of the Draft EIR assess all aspects of Project-related impacts to wildlife movement and corridors. As discussed in Final EIR response to Comment F.8-109, the Project site does provide unobstructed local movement opportunities for small animals and aerially dispersing plants and animals that reside in the area. As discussed on page 5 of the Draft Interim Wildlife Movement Corridor Assessment report, mountain lion is expected to occasionally occur on the site in search of prey though there appears to be very little suitable denning habitat (WM-1 of Appendix 5.7-B of the Draft EIR). Further, because the majority of the Project impact area is sparsely vegetated and does not provide adequate cover, it is not expected to be heavily utilized by species such mule deer or the mountain lion. The Project design has incorporated two undercrossings to facilitate local movement across SR-138. MM-14, described on Draft EIR pages 5.7-190 and 5.7-191, sets forth the specific requirements for the undercrossing located where SR-138 crosses the Project's western border near the

current intersection with Cement Plant Road and requires an open space buffer near the bridge over the aqueduct for the Cement Plant Road and other areas to allow for greater wildlife mobility.

Nevertheless, even with the design features and mitigation, the Draft EIR conservatively concludes that the Project may contribute to a cumulative significant impact on regional wildlife movement.

Response to Comment ADD-G.59-4:

Please refer to pages 5.7-56 through 5.7-64 of the Draft EIR, and responses to Comments B.4-56, B.4-57, F.5-13, F.7-21, F.8-109, F.8-110, and F.8-168 of the Final EIR regarding regional and local wildlife movement.

The discussion on page 5.7-56 in the Draft EIR that describes how species that are adapted to specific ecosystems, generally tend to stay within those ecosystems, and not traverse over large mountains through very different habitats, is a general statement and applies to most species. The discussion is not intended to describe all species in a given region. Some species are able to persist in a large variety of habitat which generally allows them to move through changing habitats and elevations such as traversing over a mountain range to and from valley floors. All four of the species mentioned (mountain lion, bobcat, deer, and coyote) are generally this type of species. As a result, they are less restricted in movement than other species, have a broader range and steady populations throughout the region, and are not considered special status due to rarity by the CDFW (see Comment ADD-G.59-2). The Draft EIR (pages 5.7-51, and 5.7-53) (as well as multiple wildlife movement studies included in Appendix 5.7-B of the Draft EIR) acknowledges the large home ranges of certain species such as the mountain lion, and states that the mountain lion is expected to occur infrequently on the Project site (Draft EIR pages 5.7-50, and 5.7-166). Regional movement linkages are critically important for genetic flow and the health of regional mountain lion population, whereas a small portion of an individual mountain lion's home range or general use area, such as the eastern portions of the site, is not.

Neither the Draft nor the Final EIR suggest that the mountain lion, bobcat, or coyote do not occur on the Project site, or that the Project site is not within their home range. Potential Project impacts to these species are considered in the wildlife movement section on pages 5.7-56 through 5.7-64 of the Draft EIR. As noted in the Draft EIR, potentially significant impacts to wildlife movement and habitat for general wildlife that would result from implementing the Project would be reduced to less than significant levels with implementation of MMs 7-14 through 7-18.

In regard to the comment stating that the suggested overcrossings and undercrossings in the Draft EIR are few and small in size, these crossing are actually improvements from the existing condition which currently requires crossing the road at grade. In addition to improving these crossing locations, the size is appropriate for local movement, which is the primary type of movement that exists within the immediate area. The purpose of the crossing is not to increase the level of movement beyond the existing conditions; indeed, any

such increase would also increase the potential for human interaction within the Centennial development and potentially increase harm to wildlife. As mentioned in the Draft EIR, the primary regional linkage occurs to the west of the project site.

The Commenter also states that it is impossible to determine if wildlife that will be cognizant of various options for movement. However, the Draft EIR is not intended to suggest that wildlife would be directed to change current behavioral patterns. Rather, the Project design, coupled with mitigation measures, minimize impacts as much as feasible by placing development further away from the regional linkage areas to the west and adding features for safer passage for local movement in and around the Project site. All suggested crossing and avoidance measures are based on the known behaviors of wildlife in the region and there is no expectation that project measures would require wildlife behavioral changes in order to be successful.

The comment regarding the low genetic diversity of the mountain lion is noted. The concept of gene flow is part of the discussion on wildlife movement and is discussed on pages 5.7-53, 5.7-60, and 5.7-166 of the Draft EIR. While a discussion of mountain lion gene flow specifically is not necessary in the Draft EIR to provide an adequate impact assessment, regional movement of large mammals is discussed at length in the responses to Comments B.4-56, B.4-57, F.5-13, F.7-21, F.8-109, F.8-110, and F.8-168 of the Final EIR.

Response to Comment ADD-G.59-5:

Regarding the ability of wildlife to find and utilize the Project's proposed underpasses and overpasses, as stated in MM 7-14, the width of the underpass will be 100 feet and then will flare out to a 150-foot width adjacent to SR-138. The flare out areas on either end of the underpass are intended to act as funnels to guide wildlife users toward the underpass.

The Draft EIR does not suggest that the absence of studies in the Biological Resources Assessment of SEAs equates to a lack of need for linkages on the Project site. Please refer to response to Comment ADD-G.59-3 and ADD-G.59-4 above.

Response to Comment ADD-G.59-6:

Regarding the ability of wildlife to find and utilize the Project's proposed underpasses and overpasses, as stated in MM 7-14, the width of the underpass will be 100 feet and then will flare out to a 150-foot width adjacent to SR-138. The flare out areas on either end of the underpass are intended to act as funnels to guide wildlife users toward the underpass.

The Draft EIR does not discount the importance of wildlife movement to large wide-ranging wildlife, and in fact, the Draft EIR conservatively concludes that the Project may contribute to a cumulative significant impact on regional wildlife movement. There is a difference between considering an area an important corridor for movement (e.g. SEA 17), and an area where certain species may be found occasionally in search of food or water (the Project site). The comment states that the mountain lion typically crosses out of areas with cover into grasslands often. This may be the case in certain areas, but the Project site has not been

shown to be an area of high importance to the mountain lion by any of the wildlife movement studies that focus on the region (Draft EIR Appendix 5.7-B).

Further, the proposed Project will not completely block off movement to large mammals such as the mountain lion. Instead, it includes two underpasses and one overpass bridge crossing of SR-138. The underpasses would provide for local wildlife usage within the area and infrequent regional movement that may traverse from areas northwest of the Project site to areas south of the Project site.

The Commenter is correct in stating that there is a very large wildlife corridor north of the Project site. This corridor is one of the main biological functions of SEA 17. The Commenter states that "this does not mean considerable portions of the Project site are not important to large, free roaming wildlife that use both heavy shrub and conifer areas as well as grasslands." However, the heavy shrub and conifer habitat commenter describes occurs west of the Project impact area; this portion of the Project was redesigned to avoid impacts to potentially important wildlife corridor habitat. The Draft EIR does acknowledge that certain mammals with large home ranges may occur on the Project site (pages 5.7-50, and 5.7-166); however, the site has not been shown to be a crucial habitat linkage area for these species. The Project site occurs outside of the large wildlife corridor (SEA 17) and was not included in SEA 17 because the habitats do not support crucial movement areas.

Please refer to responses to Comments B.4-56, B.4-57, F.5-13, F.7-21, F.8-109, F.8-110, and F.8-168 of the Final EIR for further discussion regarding regional and local wildlife movement in the Project region.

Response to Comment ADD-G.59-7:

This comment will be provided to the Regional Planning Commission and Board of Supervisors for consideration. The EIR considered and rejected alternative sites for the Project. The Project has been sited and designed to promote regional "smart growth" planning principles established by the Southern California Association of Governments' (SCAG) 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy and the County's Antelope Valley Area Plan (AVAP) for the purpose of accommodating regional growth projections in a sustainable manner that reduces criteria air pollutant and greenhouse gas emissions and promotes public health while protecting regional open space, Sensitive Ecological Areas and agricultural areas consistent with the AVAP's Rural Preservation Strategy. See Draft EIR Section 8.4.1 (which discusses why an alternative site was not evaluated in detail in the Draft EIR) and Final EIR, response to Comment F.8-20 for further discussion.

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August 4, 2018

Ms. Amy Bodek
Director, Department of Regional Planning
County of Los Angeles
320 West Temple Street
Los Angeles, CA 90012

Dear Ms. Bodek:

I'm writing in support of Centennial at Tejon Ranch.

The County of Los Angeles has been working on Centennial for nearly two decades, and it's time to approve the project and move it forward.

As you know, Centennial is consistent with the Antelope Valley Area Plan (AVAP), offering a wide array of housing, business park/office space, commercial, schools, parks and trails, natural open space, cultural, and public uses.

The community masterplan is simply the implementation of the AVAP, a balanced plan of economic opportunity and conservation. Centennial has also been at the table with the Golden State Gateway Coalition in regards to fast tracking the I-5 improvements before this new community has been set.

It is important to define the project location in terms of synergy with the growing populations near the Centennial project. There is great synergy between other Tejon Ranch projects in Kern County, including Grapevine and Tejon Mountain Village, as well as the Antelope Valley and Santa Clarita.

Centennial is LA County's opportunity to take advantage of growth at Tejon Ranch in Kern County by increasing tax revenue for the general fund and providing increased public services to North LA County, but also providing diverse working-class and middle-income families an opportunity for homeownership.

In addition, Centennial includes plans to focus on water conservation through the use of recycled water and several other sustainable sources. The project's Green Development program requires reduced potable water consumption through the use of drought-tolerant plants, low-flow showerheads, faucets, and toilets. The Centennial master plan will also use recycled water for landscape irrigation in residential common areas.

I urge the Regional Planning Commission to approve and allow Centennial to move forward. We need to finally begin development on this much-needed community.

Sincerely,

ADD-G.60-1

Response to Comment Letter ADD-G.60
Form Letter 7
August 4, 2018

Response to Comment ADD-G.60-1:

A form letter was prepared by an unknown source and was made available to the public for submittal to the County via email. These form letters appear as Appendix A-7 to this document. The Commenters' support for the Project is noted and will be provided to the Regional Planning Commission and Board of Supervisors for consideration. This form letter does not specifically address the adequacy of the EIR and no further response is required.

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To: Jodie Sackett
Subject: Centennial is the Wrong Vision for Los Angeles

Dear Jodie Sackett,

Scientists warn that we're in the middle of a climate crisis. Because transportation is the single largest driver of carbon pollution in California, new development located far from existing cities has disproportionately large climate impacts. Centennial exemplifies poor, outdated land-use planning on an unprecedented scale. This isolated new city would lock in at least 75,000 new vehicle trips per day with an average trip length of over 45 miles.

If you're committed to a sustainable future for L.A., then you need to say no to Centennial.

L.A.'s wildlands are rapidly diminishing. Ninety-nine percent of California's native grasslands are already gone forever, paved over by similar sprawl development. The Centennial project site contains the last, largest and best native grassland and wildflower fields left in California. Rare wildlife such as California condors, bald eagles, kit foxes and pronghorn also will be harmed if Centennial is built.

It's your job to protect our communities and natural resources, not sell them out to developers.

L.A. County should be setting the standard for 21st-century planning by supporting transit-friendly, urban, affordable housing. Centennial is a poster child of 20th-century sprawl development that exacerbates threats to our population through increasing greenhouse gas production and climate change, air pollution and a deteriorating quality of life.

The proposed site is in "high" and "very high" fire hazard severity zones. And it's directly on top of California's two major earthquake faults. The area was rated by the U.S. Geological Survey as having the highest level of earthquake hazard.

The county and its taxpayers will be on the hook for millions to provide basic public and emergency services to this remote area.

Instead of allowing isolated sprawl development on irreplaceable grasslands in an area at extremely high risk for fires and earthquakes, L.A. should focus on creating safe housing and economic opportunities in or near existing cities.

Please say no to Centennial: It's the wrong vision for L.A.

Sincerely,

ADD-G.61-1

Response to Comment Letter ADD-G.61
Form Letter 8
Various Dates

Response to Comment ADD-G.61-1:

A form letter was prepared by an unknown source and was made available to the public for submittal to the County via email. These form letters appear as Appendix A-8 to this document. This comment's stated opposition to the Project is noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration. With regard to the topics raised in this letter, please see Draft EIR Section 5.3, Hazards and Fire Safety, Section 5.8, Biological Resources, Section 5.10, Traffic, Access, and Circulation, Section 5.11, Air Resources, and Section 5.21, Climate Change, and Final EIR responses to Comments A.3-3, A.3-4, A.3-5, A.3-7, B.4-20, B.4-21, B.4-22, B.4-23, F.2-2, F.2-5, F.3-29, F.3A-46, F.8-20, F.8- 95, F.8-128 to F.8-131, F.8-189, F.8-204, G.31-1, H.21-1, and J.1-6. Since this comment does not raise any specific concerns regarding the adequacy of the EIR, no further response is required.

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To: Jodie Sackett; cperry@bos.lacounty.gov; Kathryn@bos.lacounty.gov
Subject: Centennial Letter

Name :
Email :
Address :
City :
Zip:

Dear Mr. Sacket:

I'm writing in support of Centennial at Tejon Ranch. The County of Los Angeles is facing a housing crisis and we need a variety of housing types in various locations throughout Los Angeles County. Centennial's master-plan will do just that; create more price-attainable housing and it will help accommodate the planned regional population and economic growth in our county.

As you know, Centennial is consistent with the Antelope Valley Area Plan (AVAP), offering a wide array of housing, business park/office space, commercial, schools, parks, natural open space, cultural, and public uses.

The community masterplan is simply the implementation of the AVAP, a balanced plan of economic opportunity and conservation. Centennial has also been at the table with the Golden State Gateway Coalition in regards to fast tracking the I-5 improvements before this new community has been set.

It is important to define the project location in terms of synergy with the growing populations near the Centennial project. There is great synergy between other Tejon Ranch projects in Kern County, including Grapevine and Tejon Mountain Village, as well as the Antelope Valley and Santa Clarita.

ADD-G.62-1

Centennial is LA County's opportunity to take advantage of growth at Tejon Ranch in Kern County by increasing tax revenue for the general fund and providing increased public services to North LA County, but also providing diverse working-class and middle-income families an opportunity for homeownership.

In addition, Centennial includes plans to focus on water conservation through the use of recycled water and several other sustainable sources. The project's Green Development program requires reduced potable water consumption through the use of drought-tolerant plants, low-flow showerheads, faucets, and toilets. The Centennial master plan will also use recycled water for landscape irrigation in residential common areas.

I urge the Regional Planning Commission to approve and allow Centennial to move forward. We need to finally begin development on this much-needed community.

Response to Comment Letter ADD-G.62
Form Letter 9
Various Dates

Response to Comment ADD-G.62-1:

A form letter was prepared by an unknown source and was made available to the public for submittal to the County via email. These form letters appear as Appendix A-9 to this document. The Commenters' support for the Project is noted and will be provided to the Regional Planning Commission and Board of Supervisors for consideration. This form letter does not specifically address the adequacy of the EIR and no further response is required.

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To: Jodie Sackett
Subject: Centennial is a terrible deal for L.A. County.

Dear Jodie Sackett,

Centennial is a terrible deal for L.A. County. Centennial would be located in a "high" and "very high" fire hazard area subject to intense winds. Locating thousands of people in this fire-prone area will certainly lead to more human-caused wildfires, scorched homes and loss of life. The immense costs of protecting residents in this remote area from inevitable wildfires would be borne by Californians in and beyond Los Angeles County.

Centennial will not help address the county's housing shortage. Building a new city 65 miles from downtown LA will not help residents live near their jobs. Instead, Centennial would require construction of a new freeway at an initial cost of $830 million, which would divert scarce funds away from transit projects that make our existing communities more livable and sustainable.

Centennial would add tens of thousands of new cars each day onto Highway 5, leading to further gridlock in Santa Clarita and the San Fernando Valley. Thousands of long-distance car trips will lead to more cancer- and asthma-causing air pollution, as well as associated public health and treatment costs.

Your decision on Centennial is perhaps the most far-reaching decision you will ever make as a county official. Please, don't approve Centennial. It would reward Wall Street speculators while leaving county residents stuck with more freeway maintenance and fire-prevention costs, more traffic, and more air pollution.

ADD-G.63-1

Sincerely,

Response to Comment Letter ADD-G.63
Form Letter 10
Various Dates

Response to Comment ADD-G.63-1:

A form letter was prepared by an unknown source and was made available to the public for submittal to the County via email. These form letters appear as Appendix A-10 to this document. This comment's stated opposition to the Project is noted and will be provided to the Regional Planning Commission and Board of Supervisors for their consideration. With regard to the topics raised in this letter, please see Draft EIR Section 5.3, Hazards and Fire Safety, Section 5.9, Population, Housing, and Employment, Section 5.10, Traffic, Access and Circulation, Section 5.11, Air Resources, and Section 5.18 Water Resources. Since this comment does not raise any specific concerns regarding the adequacy of the EIR, no further response is required.

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3.6 RESPONSES TO PUBLIC TESTIMONY GIVEN AT AUGUST 29, 2018 REGIONAL PLANNING COMMISSION HEARING

Testimony No.	Environmental Topic	Testimony	Response to Testimony
Vickie Kirshenbaum			
RPC-328[3391]	Biology Affordable Housing Greenhouse Gases	Hi. My name is Vickie Kirshenbaum. I strongly oppose the Centennial development. This project is wrong on every level. It would mean the destruction of native grasslands, critical habitat for rare birds and animals. Second, L.A. County desperately needs to invest in its urban core and create affordable housing, especially permanent affordable housing, and not far flung sprawl. We have thousands of people living on our streets. Third, voters strongly want the Southland to be a leader in reducing greenhouse gases. Our State just passed SB 100, 100 percent renewables by 2045, and yet transportation remains the biggest source of CO2 emissions. We don't want a project that would mean 75,000 automobile commutes per day. If you all move to Centennial, really, would you jump on a bus to get to work? Would you carpool? Would you able to purchase an electric vehicle? I think most of us would continue using the vehicles we're driving today, so I think it's unrealistic to think -- to -- to listen to the comments that were made earlier. Thank you.	Thank you for your participation in this public process. The Commenter's opposition to the Project, and preference for development elsewhere was heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. The County disagrees with the Commenter's characterization of the Project, which is consistent with regional and state climate change goals as discussed more fully in Final EIR, response to Comment F.8-20. With regard to grasslands and wildlife, the EIR thoroughly analyzes Project-related impacts and proposes feasible mitigation measures to avoid or substantially lessen them. This comment does not address the adequacy of the EIR and, therefore, no further response is required.

[3391] Please note that Responses to Testimony RPC-1 through RPC-327 are contained in a document entitled County Responses to Public Testimony Given at the June 6 and July 11, 2018 Regional Planning Commission Hearings, available at the County of Los Angeles Planning Department, and online at: http://planning.lacounty.gov/assets/upl/case/sp_02-232_pm060022-20180816-attH2.pdf.

Testimony No.	Environmental Topic	Testimony	Response to Testimony
Christina Fiallo			
RPC-329	Biology	Hi. Good morning. My name is Christina Fiallo. I was born and raised in California and I'm a resident of L.A. County. And I'm in love with this state. I love being able to explore beautiful trails that have not been paved over, take in breathtaking landscapes, and know that all around us wildlife exists, from bald eagles to burrowing owls to the amazing little kit fox that, like me, loves our arid climate here in L.A. Some of these creatures are thriving but some of them are on the road to extinction, and that breaks my heart. Sometimes it's easy to think that it's not our fault, it's not our fault that nature around us is dying, we aren't to blame, but our decision today will have a direct impact on these animals and on our beautiful -- on my beautiful home state. I'm not a scientist or an environmental attorney. They can tell you more about what this project is going to do. But I can speak from my heart. There is not much I know in this life, but I do know that extinction is forever. If you approve this project, this project will destroy the Antelope Valley wildlands. It will be gone. It contains some of the most diverse native grasslands and wildflower fields remaining in California, as well as species that are on the brink of extinction. These grasslands will be gone. These wildflowers will be gone. These animals may not survive. They will be gone. But what will L.A. residents get in return?	Thank you for your participation in this public process. The Commenter's opposition to the Project and preference for preservation of the Project site was heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. With regard to grasslands and wildlife, the EIR thoroughly analyzes Project-related impacts and proposes feasible mitigation measures to avoid or substantially lessen them. With regard to the Commenter's assertion that resources unique to Tejon Ranch will be lost, this is incorrect. The Project region is an important ecological region, but preservation of thousands of acres of important biological resources is an objective of the Project, and the proposed 43,080-acre mitigation preserve system contains all major habitat types affected by the Project, as well as particular individual biological resource values. (Draft EIR, page 4-4; Response to Testimony RPC-219) The biological value of the proposed preserve system is further enhanced by its continuity with other open space areas. While it is acknowledged that the Project site occurs within this important ecozone, vast swaths of biologically rich land are preserved through the Project's mitigation process. This comment does not provide evidence of any inadequacy of the EIR and, therefore, no further response is required.

Testimony No.	Environmental Topic	Testimony	Response to Testimony
RPC-330	Fire Safety Geology	We will get more traffic, more pollution, more angry Angelenos. On top of that, we will be allowing homes to be built in a high-fire, high-earthquake zone. In fact, the project site sits on one of the areas rated as having the highest earthquake risk in California. I was five years old when in 1989 -- when the 1989 earthquake hit the San Francisco Bay Area where I lived. It was the most terrifying day of my young life. I would not wish that on any child, on any family. If we approve this, we'll be exacerbating the effects of a future earthquake on these unsuspecting families who will move there and then commute here each day.	With regard to fire, the EIR thoroughly analyzes Project-related impacts and reduces impacts to a less than significant level with implementation of MM 3-9, including with regard to its location in Very High, High, and Medium Fire Hazard Severity Zones. See Draft EIR, Section 5.3, Response to Testimony RPC-309, Final EIR, response to Comment A.2-6, and Response to Testimony RPC-339 in this document for further discussion. With regard to earthquake hazard, as disclosed in Draft EIR Section 5.1, Geotechnical, the San Andreas Fault Earthquake Fault Zone and fault line cross the southwestern edge and southernmost point of the Project site, as shown on Draft EIR Exhibit 5.1-2, Geologic Hazards. However, with implementation of PDF 1-1 and compliance with State and County requirements for construction and setbacks, impacts would be less than significant.
RPC-331	Affordable Housing	There are much better solutions for housing shortages and the need for affordable housing, ones that are in line with our values of protecting residents and protecting our State's beauty. I urge you not to approve this project. Thank you.	The Commenter's opposition to the Project and request for more affordable units has been heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR and, therefore, no further response is required. The Commenter is correct, however, that there is a great need for additional housing choices and affordable housing in the region. The Project will provide needed housing choices and affordable housing.
Marty Caruso			
RPC-332	Transportation/ Traffic Biology	Good morning. My name is Marty Caruso [phonetic], and I want to state my complete opposition to the development of Centennial. I'm a six-generation Californian. I was born in Bakersfield, and we always admired the Tejon Ranch. It was a large piece of open space in our landscape. We don't admire the traffic that's on the I-5, and that this Centennial town is only going add to that. There are no provisions for it. There's no enforcement for any of the traffic that Centennial will create.	Thank you for your participation in this public process. The Commenter's opposition to the Project has been heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. The Commenter appears to assert that mitigation requirements identified to avoid significant traffic-related impacts would not be enforced. However, this is incorrect. Mitigation measures are binding requirements that will be enforced on an ongoing basis by the County, and a Mitigation Monitoring and Reporting Program will be adopted to help ensure mitigation measures will be implemented. With regard to other planning efforts for Lancaster and Los Angeles, the Commenter's testimony has been heard and will be provided to the Board of Supervisors, but such testimony does not address the adequacy of the EIR or the Project, and no further response is required. However, the Project is consistent with all applicable long-range planning documents, including the Antelope Valley Area Plan and

Testimony No.	Environmental Topic	Testimony	Response to Testimony
		As far as the Master Plan for Lancaster -- Lancaster and Los Angeles, we see beyond the Master Plan. We see that we need to preserve the open space for wildflowers, for the native plants that sur- -- that are surviving only there in the Tejon Ranch. They're being studied now. We need a place to retreat. We need a place to -- to hike on the trails. We need a place to – we need to know that there is open space still in the State of California.	the Los Angeles County General Plan, as discussed in the Draft EIR, Section 5.8. With regard to the Commenter's assertion that plants unique to Tejon Ranch will be lost, this is incorrect. The Project region is an important ecological region, and the proposed 43,080-acre mitigation preserve system contains all major habitat types affected by the Project, as well as particular individual biological resource values. The biological value of the proposed preserve system is further enhanced by its continuity with other open space areas. While it is acknowledged that the Project site occurs within this important ecozone, vast swaths of biologically rich land are preserved through the Project's mitigation process.
RPC-333	Affordable Housing	We do not need any more affordable housing. You can't even agree, the makers of the plan do not even agree what is 10 percent affordable housing. It's not going to be affordable housing. It's going to be medium-income housing. Plus the Centenni- -- I thought the Centennial project we put aside 19,000 residences for affordable housing for people from Tehachapi who need it and maybe the jobs in Kern County. And it's not going to be that either. It's going to be a chance at home ownership between 400,000 and 500,000. It's not really very affordable.	The Commenter's preference for a larger amount of affordable housing, and opinions regarding what should qualify as affordable, were heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. For details on the Project's affordable housing program, please see the Affordable Housing Implementation Plan in the Specific Plan, at Final EIR, Appendix 3-C to Appendix 4.0-A.Rev. This testimony does not specifically address the adequacy of the EIR, and no further response is required.
RPC-334	General	So, in -- in general, I just want to state my opposition to this plan. I think it's one more – one more chance at urban sprawl in our County, which does not need it. It's one more building of roads, which there are no roads there now, there are no sewer there now, there's no power plant there now. It's one more way to ruin our state, and I'd like to register my opposition to the plan. Thank you.	The Commenter's opposition to the Project has been heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. Regarding this comment's assertion that the Project constitutes urban sprawl, please see Final EIR, response to Comment F.8-20.

Testimony No.	Environmental Topic	Testimony	Response to Testimony
Tom Budlong			
RPC-335	Sprawl Greenhouse Gases	Excuse me. My name -- my name is Tom Budlong. I'm an L.A. County resident. In looking through the planning document, the agenda document, and I'm reading the words in here, which emphasizes my -- emphasize my opposition to putting this new town out in the middle of nowhere: adding expressways, highways that are proposed in order to serve circulation needs, major expressways, pipelines and well storage tanks, wastewater reclamation, solid waste, composting, road and highway construction and realignment, bridge construction, electrical, gas. This is not a benign project. This is urban sprawl at its worst. In fact, it's -- it's worse than urban sprawl. It's leapfrog urban sprawl where the cancer has gone into another organism -- as another organism. The impacts are unmitigable. I read through the EIR, as best I could, because it's only 3,000 pages, I think, and you can see them there struggling to explain and provide mitigation which will alleviate some of the negative impacts. You cannot pretend that this is mitigatable. It is unmitigable. There is going to be a huge impact to the land out there. And like I said, this is sod busting. This is leapfrog sprawl. It's sod busting as if it were the 1850s when it was an open country with unlimited room and unlimited resources, where it was almost a duty to concur the wilderness and -- and -- and the vacant country that's there. I can't imagine in this day of global warming and greenhouse gases that this will have nothing but	Thank you for your participation in this public process. The Commenter's opposition to the Project has been heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. Regarding this comment's assertion that the Project constitutes urban sprawl, please see Final EIR, response to Comment F.8-20. The County disagrees with the Commenter's characterization of the Project, and note that the Project has been situated and designed to promote regional "smart growth" planning principles established by the Southern California Association of Governments (SCAG) 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy and the County's Antelope Valley Area Plan (AVAP) for the purpose of sustainably accommodating regional growth projections in a manner that reduces criteria air pollutant and greenhouse gas emissions and promotes public health while protecting regional open space, Sensitive Ecological Areas and agricultural areas consistent with the AVAP's Rural Preservation Strategy. Also, although the comment alleges that comments on the EIR related to unrecognized impacts were inadequately considered, no further response is possible because the comment does not identify specific alleged deficiencies.

Testimony No.	Environmental Topic	Testimony	Response to Testimony
		another added impact on the greenhouse gases, which is not necessary. The talk of electric vehicles is very nice, and it might help, but it's still going to be there. I noticed in the EIR a huge list in the comments of unrecognized impacts in the EIR that were inadequately considered. There is no way to adequately consider those impacts. They will be there. You can't help it. Los Angeles needs more housing. It's already built up. It can build further up and do more – do more density here. To sacrifice our lands out there to urban sprawl, when will it stop? This is an avenue towards the total destruction of our lands. By the way, a long time ago -- I'm old enough -- it was a long time ago, I camped out there, probably illegally trespassing, but it was a magnificent experience. I was there for three or four days out in the grasslands with the wild animals that were out there, and I -- it just -- it makes me shiver to imagine destroying that. Thank you very much.	
Dorothy Johnson			
RPC-336	Population/ Housing	Yeah. My name -- my name is Dorothy Johnson. I was trained as a paralegal, but I'm not in there -- in for that purpose. I'm just a private citizen. We need more jobs in L.A. We need more housing for the homeless. The City has properties all over L.A. and they own -- own businesses all over L.A., buildings that are empty. They could be used to help the homeless. And I don't mean just to give them the -- the places to live. I mean to get them actively involved in	The Commenter's suggestions for County planning for the homeless, preference for a larger amount of affordable housing, and opinions regarding what should qualify, were heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. The County notes that details on the Project's affordable housing are in the Affordable Housing Implementation Plan in the Specific Plan, at Final EIR, Appendix 3-C to Appendix 4.0-A.Rev. This testimony does not specifically address the adequacy of the EIR, and no further response is required.

Testimony No.	Environmental Topic	Testimony	Response to Testimony
		building them. Help them -- get them to help -- help with the building on them. We also need jobs because I have friends that -- well, actually two people in my own family have bought property in Arizona, and everybody that I know is moving to Arizona, so they're going to be pretty good there. And so the only thing that I have about this problem is that I feel that this company -- I don't know that much about them, but I feel that this company is just saying "yes" because they want to get this – this project approved. The -- the prices of the houses, I don't know what the price would be, but low income would be – not be 4 or $500,000. It would be not -- not profitable -- not -- not profitable for most people to be able to go ahead and do that. I see right now 20 years down the line if their houses are built, it's going to be another Palmdale. They're going to be all wanting to move back to L.A. because the traffic is too far, too - too much to get by. So that's -- that's my -- my take on it. Okay. Thank you.	
Diana Coronado			
RPC-337	Support	Good morning, Chair and Commissioners. My name is Diana Coronado, and I'm here on behalf of the Building Industry Association. The BIA represents 1,200 companies who employ over 100,000 people all affiliated with building. That includes your builders, engineers. You have electricians, plumbers, construct -- those in construction, and many more. We are here today in support of the Centennial project.	Thank you for your participation in this public process. The Commenter's support for the Project was heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR and, therefore, no further response is required.

Testimony No.	Environmental Topic	Testimony	Response to Testimony
		As you all know, we're in a severe housing crisis -- I mean, a severe housing shortage. The bottom line is, we need more housing. According to the State and the Southern California Association of Governments, for the 2013/2021 cycle, we're topped out at a housing need of 30,199 units. So far the County has only been able to permit 3,149 units. Unfortunately, none of those units include moderate housing. However, today you have the opportunity to change that. With over 19,000 price-attainable units being developed and 10 percent of them being affordable housing, Centennial is a step in the right direction for the County. Centennial is designed to bring its first-time buyers just starting out and families looking for housing opportunities. This project will provide price-attainable housing for the missing middle. Those are your teachers, firefighters, law enforcement, nurses, and many more, as previously stated. Centennial will offer small lots, single-family detached residences, including single-family, multi-family, attached residences, townhomes, condos and apartments. With their multimodal transportation system, Centennial will encourage public transportation and walking and will provide transportation alternatives for getting to and from work as well. The BIA urges you to recommend approval to allow Centennial to move forward. We appreciate your thoughtful consideration on this project.	

Testimony No.	Environmental Topic	Testimony	Response to Testimony
Katie Brown			
RPC-338	Fire Safety	Good morning. My name is Katie Brown, and I'm from Lancaster and the Antelope Valley near where Centennial would be poised on a very high-fire risk area. And growing up in the desert, I'm no stranger to wildfire. During my freshman year of high school, fire spread from Leona Valley to Lancaster, and ash rained from the sky and we struggled to breathe and even to see. My sister rushed to her house across town and prepared to evacuate in case the fire jumped the road into her neighborhood. Luckily her home was safe that day, but the air we breathed was not, and 7,000 acres burned. I also grew up visiting my grandma in eastern Washington, which is a similar climate to northern L.A. County, and her home was beautiful, surrounded by quail and blue jays and hummingbirds, but four years ago, fires along the Columbia River came down the mountainside and burned her home to the ground. And though somber, that's not a unique story. Homes are lost every year, and we'll continue to face that reality as fires become more frequent and more intense with climate change. We can't continue to suppress fire and ecological zones that necessitate fire, like where the Centennial is plotted to be built, and we know the outcome. If my personal story doesn't make a difference to you, let's consider the economic impacts of fire. Since 2010, costs from suppressing wildfires and the damage they cause have reached $18.6 billion versus 600 million in the 1980s, 3,000 percent higher. And developers and investors do not bear those costs; rather, California residents pay for Cal – Cal	Thank you for your participation in this public process. The information the Commenter presented about fire was considered by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. With regard to fire, the EIR appropriately evaluates the Project's potential fire safety impacts under two thresholds of significance. First, the Draft EIR considers whether the Project would expose people or structures to a significant risk of loss, injury or death involving fires because it is located (i) within a Very High Fire Hazard Severity Zone (VHFHSZ), (ii) within a high fire hazard area with inadequate access, (iii) within an area with inadequate water and pressure to meet fire flow standards, or (iv) within proximity to land uses that have the potential for dangerous fire hazard. Second, the Draft EIR considers whether the Project constitutes a potentially dangerous fire hazard. The Draft EIR determined that, with implementation of MM 3-9, Project impacts related to fire hazards would be less than significant under both applicable thresholds of significance. The Draft EIR concluded that Project impacts related to fire safety would be less than significant only after taking into consideration (i) Project site access, (ii) Project site water flows, (iii) Project site topography, (iv) Project site vegetative cover, (v) existing and proposed regulatory controls, (vi) existing mutual aid agreements between federal, state, and local fire safety service providers, and (vii) Project improvements and mitigation measures related to landscaping and vegetation management, building construction, circulation, public utilities, and fire protection services, including but not limited to MM 3-9. This testimony does not specifically address the adequacy of the EIR, and no further response is required. For further discussion of fire impacts, see Draft EIR, Section 5.3, and Final EIR, response to Comment A.2-6.

Testimony No.	Environmental Topic	Testimony	Response to Testimony
		Fire, government subsidies and hazard mitigation grants for homes in high-risk areas through their taxes. And I'd like to finish by reading a short passage from Ecology of Fear, by Mike Davis, which was written 20 years ago, yet we're making the same mistakes. "For generations market-driven urbanization has transgressed environmental common sense. Monolithic public works have been substituted for regional planning and a responsible land ethic. As a result, Southern California has reaped flood, fire and earthquake tragedies that were as avoidable, as unnatural as the beating of Rodney King and the ensuing explosion in the streets. In failing to conserve natural ecosystems, it has also. Squandered much of its charm and beauty." Thank you.	
Rebecca Leevers			
RPC-339	Fire Safety	This is interesting that I should follow this speaker. I am University of California Cooperative Extension trained and master gardener, and in -- Oh, yes. My name is Rebecca Leevers [phonetic]. I'm sorry. Also I'm a member of the California Native Plant Society. But in that capacity as a master gardener and following our -- you know, the sustainability model that we're supposed to help homeowners with, I spend most of my time talking to homeowners about preparing for fire, hardening their home and of course that 100 feet of defensive space, but yet sometimes I feel a little hypocritical because I realize that how limited landscaping is when faced with a ranging inferno.	With regard to fire, the EIR appropriately evaluates the Project's potential fire safety impacts under two thresholds of significance. First, the Draft EIR considers whether the Project would expose people or structures to a significant risk of loss, injury or death involving fires because it is located (i) within a Very High Fire Hazard Severity Zone (VHFHSZ), (ii) within a high fire hazard area with inadequate access, (iii) within an area with inadequate water and pressure to meet fire flow standards, or (iv) within proximity to land uses that have the potential for dangerous fire hazard. Second, the Draft EIR considers whether the Project constitutes a potentially dangerous fire hazard. The Draft EIR determined that, with implementation of MM 3-9, Project impacts related to fire hazards would be less than significant under both applicable thresholds of significance. The Draft EIR concluded that Project impacts related to fire safety would be less than significant only after taking into consideration (i) Project site access, (ii) Project site water flows, (iii) Project site topography, (iv) Project site vegetative cover, (v) existing and proposed regulatory controls, (vi) existing mutual aid agreements between federal, state, and local fire safety service providers, and (vii) Project improvements and mitigation measures related to landscaping and

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		And so I'm looking at the fire regimes and timing and our climate, our Mediterranean climate with the native plant communities that adapted to them, but natural fire, which is not our problem, Cal Fire states that now 95 percent of our fires are due to just human activity, much of which we're not even aware of. The frequency and intensity of these fires increased, and these fires are destructive to the natural flora and fauna, as well as they are to the communities that they engulf. Wildfires have many causes, and I just want to look at one that is kind of interesting and many of us are not aware of. Cal Fire states that 14 percent of California's wildfires are ignited by vehicles just normally driving down main transportation corridors and happen to go through high-fire severity areas, so like the vehicle that suffered mechanical failure causing the car fire near Redding. If Centennial were built, Highway 35 would be transformed from a back-area road to another heavily-traveled corridor through a known very high-fire hazard severity zone. The entire Centennial project is surrounded by high and very high-fire hazard severity zones. Building this community in this isolated wilderness area would add many miles of additional wildland/urban interface to our overextended firefighting resources that would be expected to protect it with the people of California underwriting the cost. This is not right. It's just not right. The economic cost of last year's fires totally is estimated to be $180 billion, and this says nothing about the other more painful cost of wildfire. Wildfire suppressing costs have tripled in the fiscal years just from June 2013 to June 2018.	vegetation management, building construction, circulation, public utilities, and fire protection services, including but not limited to MM 3-9. With regard to vehicles traveling through the Project site igniting, first, CEQA does not require an analysis of the environment's impacts on the Project, but rather the Project on the environment. Further, the LACFD has determined that proposed fire services would meet Project-related demand, and this would include all foreseeable ignition sources. This testimony does not specifically address the adequacy of the EIR, and no further response is required. For further discussion of fire impacts, see Draft EIR, Section 5.3, and Final EIR, response to Comment A.2-6. More specifically with regard to fuel modification, MM 3-9 requires implementation of a Fuel Modification Plan, whose major components will ensure a minimum 20-foot setback from the edge of any structures; an irrigation and transition zone from 20-100 feet away, and native brush thinning zone between 100 and 200 feet away from structures. For further details of fuel modification requirements, please see Draft EIR, Section 5.3, and Final EIR, responses to Comments A.2-6, F.8-63, and F.8-64. The Commenter provides no evidence to refute that EIR analysis and mitigation are appropriate, and no further responses is required.

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		California's fire season is now 12 months long, and we're all anxiously awaiting October, which is the height of that season. It hasn't come along yet. Building Centennial would be creating another potential fire disaster, the last thing Californians need, including the people who would buy homes here. Thank you.	
Dillon Cohen			
RPC-340	General Opposition	My name is Dillon Cohen, and I'm a resident of Supervisor District 1. I am here today to ask you to vote "no" on the Centennial Specific Plan. As a Ph.D. student and researcher who studies biodiversity and evolution in the Western United States and South America, I would like to stress how important it is to conserve places like Centenn- -- Centennial. I have had the opportunity to visit Tejon Ranch several times and -- and my experiences on this very special piece of land have led me to conclude that the Centennial the site is inappropriate for development. The proposed Centennial new city is located in a well-known zone of ecological transitions. There's no other places -- place in California where plants and animals from the Tehachapi Mountains transverse ranges, the Mojave Desert intermingle. Also, given the reality of climate change, the preservation of these ecological transition zones is of utmost importance in order to ensure the species and ecological processes that have a chance to persist. Precious and beautiful habitats, such as this, should not be traded for unimaginative leapfrog development projects like Centennial.	Thank you for your participation in this public process. The Commenter's opposition to the Project, and preference for development elsewhere was heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. The EIR appropriately analyzes impacts to habitat connectivity and wildlife movement, and the Project design and mitigation measure requirements would ensure less than significant impacts, as discussed more fully in Draft EIR, Section 5.7, Biological Resources, and Final EIR, response to Comment A.2-6. This comment does not address the adequacy of the EIR, and no further response is required.

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		I urge you to send -- to send this project back to the drawing board. Thank you in advance for rejecting the Centennial Specific Plan.	
George Waddell			
RPC-341	Transportation/ Traffic Geology	Hello. I'm George Waddell. I'm a resident of Los Angeles City. I'm opposed to this. And a -- a representative of the Native Plant -- California Native Plant Society. I'm opposed to this. I think the main argument is poor planning, to increase the amount of traffic on the 5. It's going to very -- have very negative effects on -- on the traffic there. It's also poor planning to put so many people in harm's way on the most -- the largest, one of the largest and most dangerous earthquake faults in the -- in the world. It's like just asking for trouble, so -- Thank you very much.	Thank you for your participation in this public process. The Commenter's opposition to the Project was heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. The EIR thoroughly and appropriately analyzes Project impacts with regard to traffic (see Draft EIR, Section 5.10, Traffic, Access, and Circulation) and seismic hazards (see Draft EIR, Section 5.3, Hazards and Fire Safety) consistent with CEQA requirements, and mitigates impacts with feasible mitigation measures. This comment does not address the adequacy of the EIR, and no further response is required.
Pat Daw			
RPC-342	Miscellaneous	Hello, Commissioners. Thank you for the opportunity to speak. My name is Pat Daw. I am a retired architect and city planner with about 50 years of experience, a lot of it in large-scale development, maybe not unlike the magnitude of this. I have sat on the side of the table that the Tejon Ranch Company is sitting on now, so I know a lot about the insides of these projects and how they're put together and some of the things that they run into. I didn't come here to oppose this development or advocate for it. What I really came here to do was to appeal to your sense of vision in building out this site. I'm pretty convinced that you're going to pass something and this is going to go ahead.	Thank you for your participation in this public process. The Commenter's opinion about Project design is noted, was heard by the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. With regard to mitigation, implementation of all Project mitigation measures, including mitigation measures for long-term impacts, will be included in a fully enforceable Mitigation Monitoring and Reporting Program. This testimony does not address the adequacy of the EIR, and no further response is required.

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		My big ask is that you do it with some idea about demanding, really, that the Tejon Ranch Company come forward with some vision. This has to happen early in the process. It may be that we're too advanced for that to happen, but I -- I'm pretty sure that to get something in this irreplaceable piece of California, you need something really, really different, and I don't see that in the existing plan. I see it as kind of a cookie cutter thing, you know, it could have landed on the side of Orange County, for all I know. I mean, it's like something that I would have seen back in my early days as a student planner, I'm sorry to say. So I'm not really opposed to something happening, but what I'd really like you to do is, one, take Commissioner Smith's advice about enforceability seriously. If this thing is going to be built out over 20 years, what's going to happen is that this long, long list of mitigations that you're all faced with that are trying to make this plan into a silk purse are going to be really, really hard to enforce. I mean, here we are today. 20 years out, it may not even be built out yet, but if there's a new city of Centennial, who is going to have the political will and the leverage to really enforce the standards that you imposed on them? So that's a -- it's a concern to me. I haven't seen -- because I haven't really studied this in depth -- the financials and the market feasibility. I -- I somewhat question putting a standard -- sort of a standard one-size-fits-all plan on that site, as I see in the plan. It's really going to lure the market and the -- and result in the financial success that Tejon Ranch Company wants to get.	

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		I know that the planning community can do better than this. I just know it. I've seen it. I've been part of things like this, internationally and the U.S. So I just -- I guess I just appeal to you as you go forward to really, you know, take your name seriously. You're the Regional Planning Commission. Let's -- let's do some planning here and get those people who are bringing projects in to you to really think hard about that and come up with something – if there's something going to happen, I'd like to see it be the best it can be. Thank you.	
Patsy Ayala			
RPC-343	Support	Good morning. My name is Patsy Ayala, a board member from the Antelope – Antelope Valley Chamber of Commerce, Hispanic Chamber of Commerce, which represents over 20,000 employees in the Antelope area. I come before you today not -- not only as a board member but also as a resident of the area. A major concern through the region has been access to affordable housing and good jobs. The lack of these two things has caused residents to commute long distances for work, leaving little time for their people, for their family or the things they want to do. This causes great strains not only on the individuals but families as well. And then there are those who are missing the opportunity to have a house or even the dream. A dream is a dream, and always a family, as an individual you are working hard to get one of the dreams, that is having a fam- -- family in a home. That is a reality that is not happening for many families in the L.A. County area. This a great project that has a great balance between having nature but also addressing one of	Thank you for your participation in this public process. The Commenter's support for the Project was heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR and, therefore, no further response is required.

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		the most important problems to address in L.A. County, that is affordable housing. In this project, there -- there will be different options. It's not one price house. There are different options for families, as condos, apartments, and affordable housing, and also single-family homes, making sure that there is always something for every budget in this area. A project of this size also means the creation of a large number of jobs, both for construction workers as well as permanent jobs for the community. The Centennial project will bring economic development, affordable housing and a balance with nature. I humbly ask for you to approve this project as it will help address the housing crisis that is impacting many in the region. Thank you for your consideration.	
Karen Moreno-Scott			
RPC-344	Support	Good morning. My name is Karen Moreno-Scott. I am a resident of the Santa Clarita Valley, and I have come to express my support for Centennial. I am an Angelino at heart as I lived in the City of Los Angeles until I was priced out. The process of moving out of the community which I loved and where I lived happily for so many areas was painful. Looking for housing, I moved to San Fernando Valley, and eventually to the Santa Clarita Valley with my husband, who is an officer for the Los Angeles Police Department. Since then, we look to our future and are strongly considering early retirement so that we may enjoy our adult children and their growing families. But we are worried for them and wonder whether they	Thank you for your participation in this public process. The Commenter's support for the Project was heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR and, therefore, no further response is required.

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		will ever be able to afford their own homes. The cost of living has been central to our discussions concerning their future, as well as ours, and whether they can afford to have children, which as you know brings with them many other expenses. Centennial seeks to address the concerns that I and many other across the State have with the current housing crisis. The applicant has put together a project that has all the necessities to create a family-friendly environment with a bright and prosperous future. With the development of multiple schools, a library, parks and a sheriff station, plus jobs, Centennial is a place where anyone can start a family, if they want to, without having to deal with the high cost of living. I ask the Commission approve this project so that we as a State can start addressing the issues that many of us are facing every day, an issue that is being perpetuated onto the next generation for whom home ownership is becoming a dream less likely to come true. This is not acceptable. It's time to get back on track and create opportunities for the American dream to become a reality for most. Thank you for your time and consideration.	
Joseph Farewell			
RPC-345	Biology Fire Safety	Good morning. My name is Joseph Farewell [phonetic], and I'm a resident in Kathryn Barger's 5th District, and I'm a second-year law student at Loyola Los Angeles School just across the 110 Freeway. However, I'm not speaking here as a legal student but more as a citizen concerned about the Centennial development and the myriad issues it poses for L.A. County.	Thank you for your participation in this public process. The Commenter's opposition to the Project was heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. With regard to fire risk, please see Response to Testimony RPC-339. With regard to wildflowers, the EIR concludes that Project mitigation measures and the preservation of 14,908 acres of grasslands coupled with long-term management through implementation of the Ranch-wide Management Plan will sufficiently offset and fully mitigate for impacts on wildflower fields associated with the Project. See Draft EIR, Section 5.7, Biological Resources, and Final EIR, responses to Comments B.4-17, B.4-43, F.3A-19, F.8-119, F.8-

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		Indeed, while Centennial ostensibly addresses a chief concern in the Southland, housing or, more accurately, the lack thereof, it creates more problems than it purportedly solves. Given time constraints, however, I'll focus on just three of Centennial's countless problems: fire concerns, environmental damage and policy implications. First the fire considerations, always at issue in California but particularly now and especially in the near future because of our rapidly warming climate. In short, I worry that the Centennial development is putting tens of thousands of Californians directly in harm's way. This is an area that burns easily, that burns freely and will be exponentially more likely to burn with hotter temperatures and with so many more people living in this wild area. Second, the environmental damage here at the scale and in this beautiful place is unacceptable and distinctly unCalifornian. We're stewards here of a unique and fragile environment, and nowhere is this dynamic more immediate than in this particular area of California. Ripping out fields of wildflowers might be something that they do in other states, in other places, but it's not what we do here, at least in 2018.	123 to F.8-125, and H.21-1 for further discussion of impacts to and mitigation to address such impacts to wildflower fields. With regard to fire risk and the Project's designation as partially a Very High Fire Hazard Severity Area, please see Responses to Testimony RPC-338 and RPC-339. Further, as more thoroughly discussed in response to Comment ADD-G.70-1, designation of fire hazard severity zones is not intended to prevent all development, but rather to help limit wildfire damage to structures through planning, prevention, and mitigation activities/requirements that reduce risk.[3392] Further as the Project is built out over 20 years, the Fire Codes, standards, and guidelines would likely be continually updated by the State and County agencies as the knowledge gained from past fires is increased; these updated code requirements, as finalized through discussions with the LACFD, would be applied to subsequent development phases of the Project to ensure that Project development continues to meet evolving standards to ensure impacts are less than significant. (Draft EIR, page 5.3-37)
RPC-346	Population/ Housing	Lastly, the policy considerations. Every one knows that we need more housing. As a married law student who lives in his parents' back house to save money, hopefully for a house one day, I'm particularly sensitive to this fact. However, I, and I think the majority of L.A. County constituents recognize that our planning should be governed by sustainable, climate-friendly policies.	The Commenter's opinion was heard by the Regional Planning Commission and will be provided to the Board of Supervisors. However, the County disagrees with the Commenter's characterization of the Project, which has been sited and designed to promote regional "smart growth" planning principles established by the Southern California Association of Governments' (SCAG) 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy and the County's Antelope Valley Area Plan for the purpose of sustainably accommodating regional growth projections in a manner that reduces criteria pollutant and greenhouse gas (GHG) emissions

[3392] CALFIRE, Wildland Hazard and Building Codes Frequently Asked Questions: http://www.fire.ca.gov/fire_prevention/fire_prevention_wildland_faqs.

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		Centennial flies in the face of such considerations. Put simply, our local government needs to encourage and implement policies that empower sustainable development, that means vertical construction, investment in public transit corridors and building units that minimize resource use. A massive city in the middle of a beautiful nowhere accomplishes none of these goals, and its realization threatens the progressive, sustainable direction of our County's policies. Thank you.	and to promote public health. It also includes many sustainability features that go beyond what is legally required. For a more detailed discussion, please see Final EIR, responses to Comments F.8-20, F.8-204.
Hilary Black			
RPC-347	Fire Safety	Hi. I'm Hilary Black. And as a former editor of a magazine, we would get letters, and whenever we got a letter telling us how the reader felt, we knew that that represented hundreds, maybe more, maybe thousands. So I just want to acknowledge that those of us who are here today, there's a long line of people behind us who couldn't get childcare to come here today, couldn't get transportation, had to work, that feel very strongly about this project, as well, not moving forward. I am not for this project for all of the reasons that have been stated so well so far. I have a childhood friend who lived in the Coffey Park neighborhood. I was there a month before the fires. That fire jumped the 101 Freeway. I don't know if you're familiar with Santa Rosa, but it's -- this neighborhood was in the northern part of the developed City of Santa Rosa. That fire jumped four lanes, two on each side, I think -- no, more than that. I'm not sure. The 101 Freeway -- and it decimated that -- that neighborhood. We built in that neighborhood before that was a possible fire problem.	Thank you for your participation in this public process. The Commenter's testimony with regard to recent fires and preference for infill was heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. With regard to fire risk and fire services, please see Draft EIR Sections 5.3, Hazards and Fire Safety, and 5.16, Fire and Law Enforcement, and Final EIR, response to Comment A.2-6 and Response to Testimony RPC-339. With regard to infill development, while the Project site is not infill, it provides development on a site planned to accommodate regional projected growth in a manner consistent with regional strategies for achieving mandatory reductions in GHG emissions attributable to the land use sector. For further discussion, please see Final EIR, response to Comment F.8-20.

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		We know that there's a fire (unintelligible). So we have so much more information today than these gentlemen did -- women and gentlemen who have been planning this -- this development. It's passé. That -- that planner who was up here, that architect who was speaking. It's passé. This is not the way we need to move forward. We need to be an example to the rest of California. It's time Los Angeles County is an example. Let's deal with in-fill. Let's -- let's figure out how to reconfigure these empty office buildings. Let's -- let's be creative. Let's not take open space that cannot be replaced.	
RPC-348	Biology Geology	In my opinion, these houses, if they get built, they should cost 310 -- there's no price. They should be priceless because we can never recover this corridor, this wildlife corridor ever again. And I think for all of us looking to the future and acknowledging the science behind climate change, the cost that the -- that the -- the business entity is willing to pay for all of these services, a fire that comes through there, they're not going to be able to handle that by themselves and, again, I think it will come back to the taxpayers. So I really recommend you not voting this plan as it is or this plan perhaps even as it goes forward. Thank you.	The Commenter's preference for preservation of the Project site has been heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. This testimony does not address the adequacy of the EIR, and no further response is required. However, with regard to fiscal impacts, the Commenter's opinion is noted, but the County notes that as discussed in the Draft EIR, such as in Section 5.16, Fire and Law Enforcement, and Section 5.17, Other Public Services, the Project is responsible for providing infrastructure and services and would not create negative fiscal impacts on surrounding communities. With regard to the Commenter's assertion that the Project will destroy a wildlife corridor that cannot be recovered, the Commenter is incorrect. The wildlife movement studies conducted in the Project region[3393] do not support the notion that the Project site is situated within a crucial wildlife movement corridor. Local movement is mostly retained through the open space corridors scattered throughout the site, and regional wildlife movement largely occurs, based on the literature, west of the Project site.[3394] The Project site itself does not represent high quality long-range movement habitat due to the existing California Aqueduct barrier and the overall lack of cover. Wildlife are not drawn to the Project site as it generally lacks attractive resources, topography, and cover.[3395] Wildlife movement occurring from the Tehachapi Mountains to the San Gabriel Mountains south

[3393] DRP 2017. Table 5.7-2; *Id.,* pp. 5.7-23, -55, -56
[3394] *Id.,* pp. 5.7-56 to -64, -164 to -166
[3395] *Id.,* pp. 5.7-63, -64

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			of the Project is much more likely to cross west of the Project site. Studies on wildlife movement in the Project region have generally shown the Project area as a whole to be largely outside the critical regional corridor linking the Sierra Nevada-Cascade Cordillera with the Sierra Madre-Transverse-Peninsular Range Cordillera. Although the Tehachapi Linkage area, which represents the connection between these two mountain systems, occurs just to the west of the Project, the Project lands have generally not been included as part of this regional corridor. The primary resources in SEA 17, which surrounds the Project to the west and south and will remain unimpacted by the Project, are wildlife movement and the mosaic of associated habitats.[3396] Additionally, as described on Draft EIR pages 5.7-62 and 5.7-63, two regional conservation plans will assist in sustaining the functionality of the regional landscape linkage for future wildlife populations. These plans offer elements for long-term sustainability and management of a Tehachapi Mountains landscape linkage: the Tejon Ranch Conservation and Land Use Agreement and the Tehachapi Upland Multiple Species Habitat Conservation Plan. Please see Linkage Analysis for the Southernmost Portion of the Linkage from Sierra Madre to Sierra Nevada and Draft Interim Wildlife Movement Corridor Assessment, Centennial Project Site, Tejon Ranch in Draft EIR Appendix 5.7-B for more details and graphics. Also see the following responses to Comments for additional discussion of wildlife movement: F.3-24, F.3-25, F.3A-32, F.3A-33, F.3A-34, B.4-56, B.4-57, F.5-2, F.8-168, F.7-22, F.3A-34, F.3A-32, and F.3A-33.

[3396] DRP 2017, p. 5.7-8

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Jennifer Pilapil			
RPC-349	Geology Hazards Public Services	Hi. My name is Jennifer Pilapil. I'm a resident of Cerritos in Janice Hahn's district. I'm coming here today wearing different hats. I used to be the Former Deputy Director for -- in the City of Pasadena for the Health Department in charge of Medi-Cal programs, so I'm very aware of health care access issues. I also am I member of the California Native Plant Society and work in conservation. Again, I wear different hats, so -- A lot of speakers today have been talking about the wildfire issue. I know some folks -- I -- I'm sorry. I apologize. I came at 9:45, but I know there's also data out there. I don't know if anyone presented about the San Andreas Fault being an issue. Remember, the Board of Supervisors more than ten years ago, and it's always been an issue -- Olive View Hospital is the closest care-giving hospital with full service trauma and emergency services. If something happens on that side of the mountain, that's the closest hospital, which is 50 miles away. That's probably two mile -- two hours to get to. There's no way helicopters can come and rescue people. They're -- they're thinking about developing 21,000 homes? Again, in Cerritos we have about 16,000 homes with a population of about 15 -- 50,000. That's five-zero-thousand people. And you can't take all those people out of that area to bring them care. They're probably going to have to go to other counties, and then the L.A. County is going to have to figure out how to subsidize those costs to -- perhaps giving money to Kern County or	Thank you for your participation in this public process. The Commenter's testimony has been heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. With regard to earthquake hazard, as disclosed in Draft EIR Section 5.1, Geotechnical, the San Andreas Fault Earthquake Fault Zone and fault line cross the southwestern edge and southernmost point of the Project site, as shown on Draft EIR Exhibit 5.1-2, Geologic Hazards. However, the Project has been designed to avoid all designated fault buffer zones via a Geologic Safety Zone, which requires a 100-foot setback in both directions for the San Andreas Earthquake Fault Zone and unnamed faults on the Project site. Implementation of Project design, coupled with compliance with State and County requirements for construction and setbacks, would ensure impacts would be less than significant. With regard to medical care, in order to help create a complete community, the Institutional/Civic land use designation of the Project allows for the future development of a hospital/medical center and other public institutional uses of 110 acres of the Project site. Further, Health services (doctor, dentist, and clinics), medical facilities and centers, and medical/dental offices are permitted in areas designated as Commercial, Business Park, Mixed Use, and Institutional/Civic. Urgent care centers are conditionally permitted in these same land use designations. See Final EIR, response to Comment F.3A-67 for further discussion. With regard to the Project's fiscal impacts, the Commenter's opinion is noted, but the Commenter is incorrect. As discussed in the Draft EIR, such as in Section 5.16, Fire and Law Enforcement, and Section 5.17, Other Public Services, the Project is responsible for providing infrastructure and services and would not create negative fiscal impacts on surrounding communities. The Commenter provides no evidence to support assertions to the contrary, and no further response is required.

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		those sort of things. Emergency vehicles will be having a hard time getting and accessing care. I know the developer has been asked to provide their own infrastructure for those kind of things, but it's probably still going to have a shortfall. In Cerritos, we have the Sheriff's Department that the City has actually gave money, built a station for them, more than 20 -- 20 years ago, and we still have a shortfall. One deputy, our Neighborhood Watch deputy with the Sheriffs, he cost $300,000. That's just one person. And he is actually juggling watching -- like doing patrol and helping the Neighborhood Watch captain, which I am also a Neighborhood Watch captain for about 350 homes. So, again, all these are critical issues and economic needs that will have to be weighed. For -- for a grant writer, which is one of the things I do as a program manager, we're required – if we want to apply for government funding in the State, we're required to do California environmental screening to -- to check, based on Senate Bill 535, what the allocations are for a disadvantaged community. That area, because of Lancaster and a lot of the foreclosures that have happened on that side of the mountain, have actually experienced a lot of things where they're not getting the services and money that they need also. So it's going to be high-allocation needs that will be decentralized when we're already a very decentralized city just here on the other side of the mountain, so I encourage if you cannot have this developer make this happen. Thank you.	

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Elka Kolodinsky			
RPC-350	Population/ Housing Transportation/ Traffic	Good morning. Thanks for letting us be here. My name is Elka Kolodinsky, and by day I'm a policy analyst, but 24 hours a day I'm a proud Californian. I've lived my entire life in Los Angeles County, from Palmdale to Palos Verdes, Pasadena to Culver City, and a bunch of places in L.A. City, so I know this County and I've watched it change over the last 40 years. One of the things L.A. has done for the last 80 years is to try to develop itself out of its increasing housing shortages over and over again by putting single-family homes in large tracts on empty land, and that has caused a lot of issues, a lot of sprawl, a lot of traffic, all kinds of other problems for L.A. County. Just because there is an empty tract of land still available in Southern California doesn't mean that we have to put buildings there; it doesn't mean that that has to be the answer to a housing shortage. We can look into the areas where we already live, and through rezoning and other more creative ways of using the land we already inhabit, we can face our housing shortage. A lot of other people have said a lot of good things today, and that's all I'm going to say. Thanks.	Thank you for your participation in this public process. The Commenter's preference for alternative locations and methods of development is noted, was heard by the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. The County notes that while the Project site is not infill, it has been sited and designed to promote regional "smart growth" planning principles established by the Southern California Association of Governments' (SCAG) 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy and the County's Antelope Valley Area Plan (AVAP) for the purpose of accommodating regional growth projections in a sustainable manner that reduces criteria air pollutant and greenhouse gas emissions and promotes public health while protecting regional open space, Sensitive Ecological Areas and agricultural areas consistent with the AVAP's Rural Preservation Strategy. See Final EIR, response to Comment F.8-20 for further discussion.
Anabella Mazariegos			
RPC-351	Affordable Housing	Good morning, ladies and gentlemen. My name is Anabella Mazariegos. I am from OCLA and the Los Angeles (unintelligible) union and also Occupy Los Angeles. The reason that I am opposing this project, I'm advocizing for -- for housing, but I dislike very much that the government lands to be used -- given to developers.	Thank you for your participation in this public process. The Commenter's opinion with regard to affordable housing requirements is noted, was heard by the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. For details about the Project's affordable housing, please see the Affordable Housing Implementation Plan in the Specific Plan, at Final EIR, Appendix 3-C to Appendix 4.0-A.Rev. The County also notes that the Project site is privately owned, and there are no government owned lands that are part of the Project site. This testimony

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		We need to preserve our nature for our future generations. I grew up around nature, and I know how beautiful is nature. So we need to give that right to our kids, to our grandchildren. They deserve that future to enjoy because nature is beautiful. Please, stop that project. We have too many buildings unoccupied. We need to rehabilitate them, those buildings. If they – if they -- the developers, if they don't rent the units, they get taxes write-off. If people can no longer afford the high rents, people get displaced. That's not fair. To be building on government lands and provide 10 or 20 percent affordable housing and 90 or 80 percent is going to be regular market, to me something wrong. Developers build for profit not because they care for working class people. This is not an affordable house project. Stop catering to the 1 percent. We need to preserve those lands. I'm against the -- the 20 percent mandatory 2 affordable housing condition not because affordable housing is affordable -- low income, that's the way it should be, because if government is going to provide for housing, it should be 100 percent housing, not 20 percent, 10 percent. This is ridiculous. That keep catering to the 1 percent. That's why we have so many problems. People are being displaced because the corruption has been in the government when the (unintelligible) was removed from our -- our -- our laws. Now it was open flag for all the developers to start raising their rents in manipulating the -- the housing market. It's not fair. Think about the future. You always not going to be	does not address the adequacy of the EIR, and no further response is required.

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		in that position that you are right now. You have kids and grand -- and grand kids. You don't know the future. They might be homeless. Think about the future of those kids that is coming into the future. Please do not accept this project, please, not on government lands. Keep our government lands for our enjoyment of our future generations, and us too because we're still here. We haven't departured. So please, I'm against this project. Thank you.	
Jerard Wright			
RPC-352	Support	Good morning, Honorable Chair David Louie and the Regional Transpor- -- Regional Planning Commissioners. A change of pace here. My name is Jerard Wright, Policy Manager of L.A. County Business Federation. On behalf of the L.A. County Business Federation, also known as BizFed, a grassroots alliance of more 170 business organizations that represent 390,000 employers of over 3.5 million employees in L.A. County, we are -- we are here to express our support for Centennial at Tejon Ranch as a mixed-use project, which plan to build 19,000 new homes, making a significant dent in our housing crisis. But there's an important other piece that's mentioned that's been suggested by -- by -- by the public up here, which is looking for other opportunities to build and make a dent in our housing crisis. And it's just a sobering thought, that we can stimulate our increase in housing production, done so with the accessible dwelling units, building more housing on existing land and existing zoning. But here's the problem. It's called CEQA. And the CEQA lawsuits are killing and stopping urban in-fill	Thank you for your participation in this public process. The Commenter's support for the Project was heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR and, therefore, no further response is required.

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		projects in Los Angeles County next to transit, the very areas that we need and should put in more housing. This is per SCAG data. So if you have any other questions. I also sent that to Rosie Ruiz because this has just come up spure of the fly through the public comments, and I presented that to the Commissioner. You should have received that via e-mail. But it's important to realize that 70 percent of those lawsuits affect the urban in-fill environment. Why is that important? Because that's why Centennial has its project here, because you can't build it anywhere else. It's an important -- it's important to note and sobering to note that when you do not and cannot build housing, we're just going to drive the costs up of how to live. That's why people are traveling so far just to find affordable housing of price -- pricing of housing that they can afford to grow a family, to build long-term financial income and wealth. Those are important aspects when we're looking at our -- at our local economy, as well as our generational economy, because that's what's going to be important for our kids, our future generations to thrive and survive here in Los Angeles County. And I state that because we need to be very mindful of that -- that effect of CEQA lawsuits. And that's something we will present to the Commissioners later at a future date. But that's just sobering to know. 70 percent of those lawsuits affect urban in-fill housing. If we just eliminate that, there would be a lot of -- a lot more housing supply. We're only permitting 10 percent of what we could possibly make and build for -- for our region.	

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		So with that, I will close. Thank you for your consideration and your attention at this point in time.	
Nodeey Dodson			
RPC-353	Miscellaneous	My name is Nodeey Dodson. I spoke previously but want to make some comments about the developer. The property being said is devalued and not worthy of preservation and that is based on science? I want to point out whose science? Many of the science is signed by the developer and signed non-disclosure agreements. That means if they find something super rare on that property. They are not allowed to devulge that. I also find disingenuous that the property owner is not giving the conservative property to the public. It's giving it to the Conservancy and the Conservancy is controlled by Tejon Ranch Company. They tell the Conservancy what to do and who is allowed on that property. It is not public access. I would urge you to have them make that change. I believe the land is high value. As everybody has said it is high value grassland, it's a corridor, it's annual wild flower fields that millions of people come to see each year.	Thank you for your participation in this public process. To the extent the Commenter would prefer preservation of the Project site, this opinion was heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. To the extent the Commenter asserts that the EIR represents the Project site as devoid of biological resource value, this is incorrect. The EIR thoroughly analyzes the Project site and Project-related impacts with regard to biological resources, and acknowledges that the Project site occurs within an important ecozone. The EIR identifies feasible mitigation measures to avoid or substantially lessen impacts., and vast swaths of biologically rich land are preserved through the Project's mitigation process. The proposed 43,080-acre mitigation preserve system contains all major habitat types affected by the Project, as well as particular individual biological resource values. With regard to the Commenter's testimony about management of Project open space and mitigation lands, the County disagrees with the Commenter's assertions. The Tejon Ranch Conservancy was created by the RWA to serve as an independent, third party responsible for holding conservation easements and managing public access, scientific study, and restoration activities in the open space conservation areas of Tejon Ranch. The Conservancy has a twelve-member Board of Directors, with four members appointed by the environmental groups who are signatories to the RWA (Natural Resources Defense Council, Sierra Club, California Audubon, Endangered Habitats League, and Planning & Conservation League), four members appointed by Tejon Ranch, and four independent Board members. The County also has authority to monitor and will monitor compliance with binding mitigation measure requirements on an ongoing basis. The Commenter appears to assert that because signatories to the RWA signed non-disclosure agreements during negotiations, and have agreed not to oppose the Project, important scientific information relevant to Project impacts has not been disclosed. This is incorrect. The entirety of the Project site has been evaluated for biological resources and to appropriately assess potential Project-related impacts. The EIR, including its biological impact analysis, complies with CEQA requirements, as further discussed in response to Comment ADD-F.13-16. Further, as appropriate under CEQA, the Draft EIR

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			focuses on impacts associated with solely the Project site, and not the Tejon Ranch as a whole.
RPC-354	Public Services Water Resources	I also ask how does this project provide its own water in this land of drought in the desert? The developers said they will finance all the infrastructure, but who will pay all the salaries and benefits and on going equipment costs for those people that need to be hired to staff the sheriff's and the emergency facilities and the schools? Fine, you build the building, that's fine, but you know yourself what a policemen costs just for salary, $100,000 a year, a doctor, a teacher, that comes from the taxpayers and that's it. Thank you so much.	With regard to water supply and drought, after thorough analysis, the EIR appropriately concludes that Project water supplies will sustainably meet buildout potable and recycled water demands and would in fact maintain an average annual reserve supply in the two Project water banking facilities of more than 79,000 acre-feet after buildout has been achieved. This surplus would persist over time based on an 82-year hydrologic period of record, including single-dry and multiple-dry years, and taking account of potential climate change impacts. Please see Draft EIR, Section 5.18, Water Resources, and Response to Testimony RPC-76 for further discussion. With regard to fiscal impacts, the Commenter's opinion is noted, but the County notes that as discussed in the Draft EIR, such as in Section 5.16, Fire and Law Enforcement, and Section 5.17, Other Public Services, the Project is responsible for providing infrastructure and services and would not create negative fiscal impacts on surrounding communities.

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Steve Hartman			
RPC-355	Biology	Good morning, my name is Steve Hartman, a Los Angeles resident and President of the Board of the California Native Plant Society. In a letter to the Planning Commission dated August 17th, CNP staff or Nick Janson states the land is already preserved with conservation easements for its mitigation design. What that means is that the Centennial project proponents double dipped when it came to the mitigation lands. The plant community most affected is native grass lands. one of the most threatened vegetation types in our states and the land which is not spoken for in our nation is not adequate mitigation. Does the Tejon Ranch Company have a viable mitigation preserve if the lands that they are saying are for mitigation already have conservation easements on them. I haven't heard the Commissioners discuss is that issue, and Nick could send that letter in so I would like to hear the answer on that. The more I dig into this project, the more problems I see.	Thank you for your participation in this public process. The Commenter's opposition to the Project was heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. With regard to the California Native Plant Society's letter dated August 17th, signed by Nicholas Jensen, the County reviewed and prepared responses to all comments contained in said letter, which can be found at responses to Comments ADD-F.16-1 through ADD-F.16-10. These were presented to and considered by the Regional Planning Commission. Specifically, with regard to the adequacy of conservation easements, please see responses to Comments ADD-F.16-3 through ADD-F.16-7.
RPC-356	Biology	What about the land surrounding Centennial. It is not as if there will be an invisible wall preventing the citizens of that new city from venturing a field and introducing human impacts into a habitat into adjacent lands that have previously been relatively left alone. Human impact such as fire, off road vehicle tracks and thus the introduction of invasive weed species pose a serious and on going problem. This is not a profit when it comes to preserving Los Angeles's biological diversity. Last time I came to you guys, I called this leapfrog development. It's not leapfrog development. It's leap bull frog development. Thanks.	With regard to areas surrounding the Project site, the EIR appropriately analyzes both Project-related impacts and the potential for growth inducement. With regard to growth-inducement, the Draft EIR conservatively concludes that the existence of the Project makes it reasonably foreseeable that additional development proposals seeking AVAP amendments could be made outside the West EOA, which is considered a significant, adverse indirect growth-inducing impact. Draft EIR, Section 7.0, Cumulative Impacts, pages 7-19, and Section 6.0, Growth-Inducing Impacts, pages 6-6 to 6-9. However, the Project does not constitute leapfrog development, nor would it contribute to sprawl, as discussed further in Final EIR, response to Comment F.8-20. With regard to Project development-related impacts on surrounding areas, Project design takes the surrounding environment into account, and the EIR appropriately analyzes and mitigates impacts on the Project site and areas immediately surrounding it with

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			feasible mitigation measures. This testimony provides no evidence to the contrary, and no further response is required. With regard to invasive weeds, the EIR appropriately analyzes potential impacts (see Draft EIR, page 5.7-167) and identifies mitigation to reduce impacts to a less than significant level – MM 7-13 requires the Landscaping Plan to include a plant palette composed on non-invasive species only, and include a list of invasive species prohibited from being planted on the Project site, which will be provided by the Homeowners Association to future residents, along with related educational materials. (Draft EIR, page 5.7-190) In addition, retail sales of these invasive plant species will be prohibited at any businesses (nurseries) located within the Project site; Landscape plans shall encourage planting of local natives typical of native vegetation within ten miles of the Project site. (*Ibid*.)
Richard Dickey			
RPC-357	Biology	Hi, my name is Richard Dickey a professional photographer and taking pictures of Los Angeles County over 30 years in the county. I visited this land for many years. I want to talk to you about the reason the Los Angeles county has a program and why this program should still be enforced in this area. Visualize yourself standing among a sea of flowers and a soft winter and filled with the airs and flowers flapping in the breeze and this suddenly envelopes you and the russeling seem to vibrant upon you and the flowers under your nose and one becomes aware of the powerful giddy radiating from the land and the completeness flows in the desert as if mother earth were laughing with flowers. Only in California land steep has become an ethos to the world and one been able to witness such things. Once California's wildlife and wild flower preservation. California slowly being loved to death exceeded by a population that is quickly disappearing into history with only remote islands and native habitats remaining. In the west valley, a place called the Tejon Ranch. If ever there is a reason to have seas and keep them in force, this is why the program was created. This is an emotional	Thank you for your participation in this public process. This testimony has been heard by the Regional Planning Commission and will be passed on to the Board of Supervisors for consideration. While a portion of Significant Ecological Area (SEA) 17 is within the Project site, Project development avoids the SEA entirely. The SEA would remain intact, and the Project would not result in any fragmentation of this area (see Draft EIR Exhibit 5.7-15, Significant Ecological Areas). Approximately 3,865 acres of on-site lands are located within the boundaries of SEA 17 and would be preserved as potential on-site mitigation lands. MM 7-21 further requires that all brush clearance zones be contained within the current Project impact boundary and no overlap with SEA 17 shall occur. This testimony does not address the adequacy of the EIR, and no further response is required.

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		and spiritual resource for all in Los Angeles County to cherish and protect for future generations. Trust me, you will not find anything like this anywhere else in the state or the planet. Let's not mess this up too. Thank you.	
Miles Lewis			
RPC-358	Fire Safety	Can I begin? Okay. Hello Commissioners, I came last time too. My name is Miles Lewis, I live in the west San Fernando Valley. I came knowing that change can be quite gradual and in the last 50 years there have been policy considerations for the region in general and there has been improvement but it does seem especially with these wildfires that a lot of symbolic substantial changes has to happen where we can address a new norm and given how inappropriate this development is. This doesn't only apply to development but environmental advocacy and they talked about a lot about how they had a settlement and this was before the wildfires. The worst and second worse wildfires that we've ever had in the past years. I doubt that anyone would want to resettle that because it would be a blight on everybody's name.	Thank you for your participation in this public process. This testimony has been heard by the Regional Planning Commission and will be provided to the Board of Supervisors. With regard to fire risk and fire services, please see Draft EIR Sections 5.3, Hazards and Fire Safety, and 5.16, Fire and Law Enforcement, and Final EIR, response to Comment A.2-6 and Response to Testimony RPC-339. This testimony does not address the adequacy of the EIR, and no further response is required.
RPC-359	Public Services Transportation/ Traffic	But, another point is when the architect spoke, he talked about his 50 years of experience and how this is a cookie cutter development project and how to raise the bar. So it seems like they are doing very little as he was noting requiring electrics of all homeowners seems the only way you will be able to accomplish anything in that direction. We already have electric charging which seems very little in terms of electric incentivize. You can have all regard and mandatory public transportation. This would be an ideal experimental community like we had 40 years ago. Even then it would be an environmental disaster. It seems like kind of a joke.	The Commenter's opposition to the Project, including with regard to Project design, electric vehicle use, and medical care is noted, was provided to the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. Project design and mitigation measure requirements provide a robust program to minimize GHG emissions, reduce vehicle miles traveled, encourage alternative modes of transportation, and incentivize electric and other alternative vehicle use. For example, MM 10-25 requires implementation of the Project's Mobility Plan and the creation and ongoing operation of a Transportation Management Association (TMA) to implement on-going transportation improvements and programs, including a combination of measures to ensure that a minimum of 30 percent of total daily internal on-site trips are completed by using transit modes other than single occupancy vehicle use, and a minimum of 20 percent on total off-site

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		And what seemed to me like cynical jokes. The micro hospital which the chair brought up. It sort of seems like a joke. It doesn't really seem to address some of the major concerns that came up last time.	peak hour commutes to and from the Project site are completed by using transit modes other than single occupancy vehicles. MM 10-25 also requires that the TMA provide an am and pm peak hour demand-based multi-passenger transit service for Project residents and employees that links the Project to the nearest Metrolink station and commuter transit hub to the south, east, and north, and to other commuter destinations as warranted by consumer demand. The EIR includes several mitigation measures to ensure an appropriate amount of EV charging stations and preferential parking will be provided (see MMs 11-4, 11-6, 21-15, 21-16, 21-17, 21-18, and 21-19. Please see Final EIR, response to Comment F.8-204, and Final EIR, Appendix 2.0-C.Rev, Mitigation Monitoring and Reporting Program, Appendix 4.0-A.Rev, Centennial Specific Plan, and Attachment H to Supplemental Staff Memo to Regional Planning Commission, titled Updated Greenhouse Gas Calculations for the Centennial Project Final Environmental Impact Report and provided to the public in advance of the August 29 Regional Planning Commission hearing[3397], for further details. This testimony does not specifically address the adequacy of the EIR, and no further response is required.
RPC-360	Affordable Housing	Affordable housing, you had a discussion of 15-10% affordable housing. And they seemed to drop it and joke about it.	The Commenter's opinion is noted, but the County disagrees with the Commenter's characterization of the Regional Planning Commission's consideration of affordable housing. For details about the Project's affordable housing program, please see please see the Affordable Housing Implementation Plan in the Specific Plan, at Final EIR, Appendix 3-C to Appendix 4.0-A.Rev.
RPC-361	Greenhouse Gases Water Resources	A water supply. The State of California is water wars and labyrinth time with water and policy and law. Having your own water supply doesn't even make sense in environmental terms, and electric vehicle infrastructure which we discussed which is something being figured out now but in no way can be a subtle part of the proposal. Thank you very much.	The Commenter's opinion is noted, was provided to the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. With regard to sustainable water supply, please see Draft EIR, Section 5.18, Water Resources, and Response to Testimony RPC-76. Electric vehicle infrastructure is an important part of the Project, as explained above in Response to Testimony RPC-359.

[3397] Available at: http://planning.lacounty.gov/assets/upl/case/sp_02-232_pm060022-20180816-attH1.pdf.

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Aaron Elkels			
RPC-362	Miscellaneous	I'm Aaron Elkels. Sorry, I was at the restroom. As mentioned before, this is some of the landscapes that are the most beautiful and last ones left in California. People travel from all over the world to see the California super bloom. It's really incredible that we are considering to collectively allow such a precious area of our state to be paved over again. Regarding the housing crisis, and I'm a young person, I hope to some day own a house too. But the extremely rare ecology of this area of our state should not suffer at the expense of lack of problem solving ability or creativity. Anything can be said of the human experience and that we are constantly learning and having to correct the mistakes of the past. Please do not vote in favor of another mistake. Thank you.	Thank you for your participation in this public process. The Commenter's opposition to the Project and preference for preservation of the Project site are noted, were heard by the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. The County notes that the Project has been sited and designed to promote regional "smart growth" planning principles established by the Southern California Association of Governments' (SCAG) 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy and the County's Antelope Valley Area Plan (AVAP) for the purpose of accommodating regional growth projections in a sustainable manner that reduces criteria air pollutant and greenhouse gas emissions and promotes public health while protecting regional open space, Sensitive Ecological Areas and agricultural areas consistent with the AVAP's Rural Preservation Strategy. See Final EIR, response to Comment F.8-20 for further discussion. With regard to the Commenter's assertion that resources unique to Tejon Ranch will be lost, this is incorrect. The Project region is an important ecological region, and the proposed 43,080-acre mitigation preserve system contains all major habitat types affected by the Project, as well as particular individual biological resource values. The biological value of the proposed preserve system is further enhanced by its continuity with other open space areas. While it is acknowledged that the Project site occurs within this important ecozone, vast swaths of biologically rich land are preserved through the Project's mitigation process. With regard to aesthetic impacts, the EIR acknowledges that the Project will result in significant and unavoidable impacts related to a change in visual character of the site, but the Project does propose to preserve many existing features to minimize visual alteration of the site, as listed in PDFs 13-1 through 13-6, and required by implementation through MMs 7-13 and 13-1 through 13-3. (Draft EIR, page 5.13-1) These include retention of rock outcroppings visible from off-site areas; use of landform/contour grading; use of landscaping designs that are similar to the natural topography; preservation of open space; use of native and regionally appropriate plant species in public landscape areas; provision of development setbacks from natural areas; and inclusion of aesthetically pleasing and consistent Project signing and monumentation both internally and externally. However, even with these features, the overall change to the site resulting from grading and development of the Project would be a substantial visual impact that may be perceived by some as an impact for

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			which no additional feasible mitigation exists and would therefore remain significant and unavoidable. (*Ibid.*)
Priscilla			
RPC-363	Support	Good morning, my name is Priscilla. I have lived in the little Township of Gorman for 19 years with my husband. I'm here to demonstrate my support for Centennial, and you have heard that Centennial offers is a self sustaining community and I have watched this develop over the last 19 years how these people have really worked towards that. They offer housing, parks, schools, are open space, jobs and retail uses with jobs. The benefits that will be brought to the local community are endless. Centennial plans on expanding the public services in the area with a development of a sheriff's station which we need desperately. We can wait up to 2 hours before a sheriff can come to our property. Public library, up to four fire stations, and an urgent care facility. These communities services would have an immediate effect, a positive effect in our community. And emergency responses to our community is very limited. This is something that has a personal effect on me and my family. My husband is 90 years old. I'm quickly approaching my 80s, and when he falls, I have to call the fire department to help me lift him up and to take care of the situation. And he's at a constant risk at falling at this age, and I have had to make very sure in getting here that I have someone at home to watch over him when I leave. Anytime I leave the ramp, it's about a 2-hour round trip just in travel time to the nearest city for services, and shopping. Paramedics would be so helpful here to ease our worries because many people in these mountain communities are advancing ages and we need help.	Thank you for your participation in this public process. The Commenter's support for the Project was heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR and, therefore, no further response is required.

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		It's just the way it is. And to have a quicker response time would be very very helpful and ease our worries. I have been in contact with this team for many years, for 19 years, they have been so helpful and really listen to the community's concerns. They have proven that. So I urge this commission to approve this project. Thank you very much.	
Richard Zonter			
RPC-364	General Opposition	My name is Richard Zonter. Thank you very much for listening to me today. My family has been in Southern California since the late 1800s. Most people speaking do not live close to this proximity of the project. I have lived here for 30 years and celebrated as a resident all of my life. I have lived the changes in San Fernando Valleys and moving away from the progress. The Tejon Ranch Area is a last example of old California. Please don't allow it to be destroyed. This is leapfrog development at its worse. Thank you.	Thank you for your participation in this public process. The Commenter's opposition to the Project was heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. For an in-depth refutation of the assertion that the Project constitutes leapfrog development, please see Final EIR, response to Comment F.8-20. This comment does not address the adequacy of the EIR and, therefore, no further response is required.
Rachel Wane			
RPC-365	Introduction	My name is Rachel Wane. I live in Pasadena. I was a former park ranger in Monrovia. Now I lead a group at the national forest. I spoke last time on this subject and thank you for letting me speak again. I would like to contrast this project with the project on the West Carson transient oriented development at the last meeting and the places development already in an organized area right next to employment and with what seems like genuine fair affordability on serving a more realistic population seeking housing. I think that's the kind of project we should be doing. I'm frustrated by what seems to be inadequate responses by the proponent to comment in previous testimonies including my own.	Thank you for your participation in this public process. The Commenter's opposition to the Project and preference for a different type of project was heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. The County has appropriately responded to all correspondence received on the Project and the EIR, including testimony at the previous June 6, 2018 and July 11, 2018 Regional Planning Commission hearings. This testimony does not address the adequacy of the EIR, and no further response is required.

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RPC-366	Sprawl	So many of us see this project as sprawl. We used that word over and over in the response to comments in the testimony. I have noted that the proponents contest this area and it comes down to notice. I guess it's just a semantic argument but it makes common sense with respect to what's sprawl and what's in fill. I think normal people see this as sprawl.	The Commenter's disagreement with the County's discussion of sprawl and assertion that the Project neither constitutes nor contributes to sprawl was heard by the Regional Planning Commission and will be provided to the Board of Supervisors. The County continues to direct the Commenter and others to the in-depth discussion of this issue, in Final EIR, response to Comment F.8-20.
RPC-367	Air Quality Greenhouse Gases Transportation/ Traffic	Similarly common sense and logic say the project will increase traffic, and with the air quality, climate change problems. The proponents present numbers that contest this but I don't think the numbers on paper really argue against common sense. It's going to be a traffic increasing project.	The Commenter's disagreement with EIR analysis of traffic, air quality, and greenhouse gas related impacts is noted, was heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. The County notes that the EIR thoroughly and appropriately analyzes and mitigates these impacts with feasible mitigation measures. For further discussion, please see Draft EIR Section 5.10, Traffic, Access and Circulation, Section 5.11, Air Resources, and Section 5.21, Climate Change. The Commenter provides no specific assertions or evidence to the contrary, and no further response is required.
RPC-368	Biology	I'm dissatisfied to the response to my own testimony regarding hazardous of the wildlife and I pointed to wildlife hazard and counter hazards. Actually wildlife and counter hazards weren't address in a response. If a snake gets into your garden, you kill it because it's a snake. This is a wildlife interface and there are impacts that aren't mitigated for that don't need to be caused.	The Commenter appears to be referring to her previous testimony and County's response to same, at Response to Testimony RPC-196. The Commenter previously stated that "…there is always a permanent loss to nature. You have to bulldoze buffer areas around our developments. Animals are simply killed because we can't coexist with them – all the things we have to do." The County interpreted the previous testimony as a reference to fuel modification requirements to reduce fire risk, which require the creation of buffer zones around Project development footprint areas. Impacts in these areas have been appropriately analyzed in the EIR and mitigated to the extent feasible. With regard to the Commenter's clarifying testimony about the behavior of Project residents, it can be reasonably assumed that Project residents will follow any legal mandates with regard to wildlife protection. Further, the EIR appropriately analyzes all Project-related impacts on biological resources, including with regard to human intervention, and mitigates them with feasible mitigation measures. This testimony does not provide specific evidence of inadequate analysis, and there is no further response required.

Testimony No.	Environmental Topic	Testimony	Response to Testimony
RPC-369	Biology Fire Safety	In terms of wildfire, there is a discrepancy in the fuel modification Zone C in the plan which is that is described on maps is undisturbed vegetation, but it's described in text where areas where thinning occurs. As discussed in the Monrovia Community Wild Land Protection Plan vegetation such as chaparral introduces invasive species which are non-disturbing.	Per the EIR, fuel modification Zone C, if applicable, extends from the edge of Zone B up to 200 feet from structures. Vegetation will consist mainly of native plants with appropriate thinning and spacing; adequately spaced ornamental shrubs and trees are allowed (if approved by LACFD) but generally not recommended due to water conservation goals. The objective of this zone is to slow the rate of fire spread, reduce flame lengths, and minimize the intensity of the fires prior to reaching irrigated zones (i.e., Zones A and B) or the structure. (Draft EIR, page 5.3-22) While the majority of the Fuel Modification Zones will be within a Transition Zone per the Specific Plan, if applicable, Zone C may extend past the Transition Zone, and tract maps will provide appropriate detail. See Final EIR, Appendix 4.0-A.Rev, page 3-29 and Figure 3-22. With regard to invasive plant species, the EIR appropriately analyzes potential impacts (see Draft EIR, page 5.7-167) and identifies mitigation to reduce impacts to a less than significant level – MM 7-13 requires the Landscaping Plan to include a plant palette composed on non-invasive species only, and include a list of invasive species prohibited from being planted on the Project site, which will be provided by the Homeowners Association to future residents, along with related educational materials. (Draft EIR, page 5.7-190) In addition, retail sales of these invasive plant species will be prohibited at any businesses (nurseries) located within the Project site; Landscape plans shall encourage planting of local natives typical of native vegetation within ten miles of the Project site. (*Ibid*.)
RPC-370	Biology	In bringing up the conodor, the micro trash and the ingestion will proceed and that is significant. Thank you very much.	The Commenter's opinion with regard to impacts to California condor was heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. However, the County disagrees and notes that the EIR appropriately analyzes impacts on condors and identifies feasible mitigation to ensure less than significant impacts with regard to micro-trash ingestion. MMs 7-6 and 7-15 contain robust microtrash education, avoidance, and removal requirements. (See Final EIR, response to Comment F.8-141, and page 3-165.)

Testimony No.	Environmental Topic	Testimony	Response to Testimony
Ankur Pattel			
RPC-371	Affordable Housing Biology	My name is Oncor Pattel. No one is taking this project lightly. It is to intentionally respond to the criticis brought up at the last month's meeting. Now you are responding to this team with half measures like micro hospitals. 90/10 is left for open space. This is 100% impactful. There is no way of getting away from this. It's almost funny. They are saying they are going to create open space. They are go to to create open space. This whole framing is wrong on its face. The based on science, we know the science shows we are in the middle of an eco side. The planet is being destroyed. A couple electrical cars isn't going to do anything about it. The planet is in the middle of debt and it is our responsibility to plan the future accordingly. This project is going to continue down that path or you are going to have the at some point to rethink this. Seeing that staff is already for this is a little bit disappointing. But your no vote can give the Board of Supervisors leverage for things like 15% or 20% affordable housing today. If you vote no now today, that will give our Board of Supervisors leverage when they appeal and bring it up next time because we know they are not going away. We know their multibillion dollars with all of these lawyers, we know they are not going away but your no vote can give these supervisors leverage. I want this done, I don't see it done meaning none instituted, but again, with the staff recommendation. I'm curious if they even talked to the office of sustainability, but we haven't gotten there yet. There is not mitigation, it is not enough mitigation. No burden to the county,	Thank you for your participation in this public process. The Commenter's opposition to the Project and disagreement with Applicant and County representations were heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. The County has maintained an appropriate relationship with the Project Applicant at all times, and the EIR has thoroughly analyzed and mitigation Project-related impacts with feasible mitigation measures. This testimony does address the adequacy of the EIR, and no further response is required.

Testimony No.	Environmental Topic	Testimony	Response to Testimony
RPC-372	Public Services Utilities	Roadways, fire, school, county, utilities? How is that going to be paid for? Where is that in writing? How is that going to be done?	The EIR, Development Agreement, and Specific Plan all discuss the Project's provisions for roadways, fire services and facilities, and utilities, including with regard to funding. Please see Draft EIR, Sections 4.0, Project Description; 5.16, Fire and Law Enforcement; 5.17, Other Public Services; 5.20, Dry Utilities; Final EIR Appendix 4.0-A.Rev, Centennial Specific Plan (Revised); and the Draft Development Agreement provided with materials for the August 29, 2018 Regional Planning Commission hearing, available at: http://planning.lacounty.gov/assets/upl/case/sp_02-232_pm060022-20180816-attH11.pdf. With regard to fiscal impacts generally, as discussed in the Draft EIR, such as in Section 5.16, Fire and Law Enforcement and Section 5.17 Other Public Services, the Project is responsible for providing infrastructure and services and would not create negative fiscal impacts on surrounding communities. This testimony does not address the adequacy of the EIR, and no further response is required.
RPC-373	Affordable Housing	The missing middle. They talk about affordable housing. The difference between 10% and 15% of affordable housing, that's $500 million. Probably more. This is not affordable housing in the first place.	The Commenter's preference for more affordable housing and opinion about what should qualify was heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. For details on the Project's affordable housing program, please see the Affordable Housing Implementation Plan in the Specific Plan, at Final EIR, Appendix 3-C to Appendix 4.0-A.Rev. This testimony does not address the adequacy of the EIR, and no further response is required.
RPC-374	Miscellaneous	But you have leverage and now people with your back with loud voices in favor of a smart approach to this, you have an opportunity to take a bold assistance. Vote no against this developer and rethink this. After 10 years, they still have a lot of bad answers after all of this we have talked about. You mentioned this conservancy, how does this get input as this goes on. You have the leverage to do something better. I still think you have the opportunity to stop this in its tracks but you can do something better.	The Commenter's opposition to the Project was heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. With regard to the Tejon Ranch Conservancy, it was created by the RWA to serve as an independent, third party responsible for holding conservation easements and managing public access, scientific study, and restoration activities in the open space conservation areas of Tejon Ranch. The Conservancy has a twelve-member Board of Directors, with four members appointed by the environmental groups who are signatories to the RWA (Natural Resources Defense Council, Sierra Club, California Audubon, Endangered Habitats League, and Planning & Conservation League), four members appointed by Tejon Ranch, and four independent Board members. This testimony does not address the adequacy of the EIR, and no further response is required.

Testimony No.	Environmental Topic	Testimony	Response to Testimony
Frank Williams			
RPC-375	Support	Good morning, Chair and Commissioners. My name is Frank Williams, and I am a volunteer here. This is my second time. My wife actually dressed me today with my suit. I just wanted to let you know that. I am an advocate for housing. I am the Vice-Chair for Los Angeles County for the 200 and we are a statewide coalition of advocates for housing targeting pretty much minorities, the under served communities and of course millennials. I am very proud to be here because I would like to say that I offer a voice for those that don't have one and most of them are homeowners that are not a homeowner yet, I'm sorry. In search of being a homeowner. In my 28 years of experience and having the experience of a family and a young child taking their shoes off and experiencing their own room for the first time has a generational impact. A lot of times when people wonder where are we going to build, there is a lot of CEQA stopping in this area. People like urban areas of California, but these are urban parts of California and they are very selective. I hear a lot about the cancer of urban sprawl. I'm surprised that we don't hear the term of our harmonious neighborhoods. Yes, that was heard right here at this Planning Commission after World War II. That almost seems to have that rising content because those that are approved under the most stringent underwriting for lending but they don't have a home that they qualify for. So 10%, whatever the percentage number that you approve today, those are more families that are going to be greatly affected in their generational wealth. You cannot build wealth if you are a renter and you cannot have more affordable housing. That is going to affect the rental cost. For affordable housing, I would say entry level housing. We are	Thank you for your participation in this public process. The Commenter's general support for the Project was heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR and, therefore, no further response is required.

Testimony No.	Environmental Topic	Testimony	Response to Testimony
		not talking about people being renters but homeowners that are firefighters, teachers, people that are just trying to own something, own a piece of California. And a lot of issues that don't get addressed are issued when you talk about buildings and almost like waiting for them to say, let's not build homes because we are worried about earthquakes. There is a lot of other issues that come across and it's very important that we all understand that this is a self contained project that supports home ownership and general wealth. Thank you.	
Ron Bronze			
RPC-376	Support	Good morning, Commissioners, my name is Ron Bronze. My ranch is in the west of Antelope Valley. I have come here to speak in support of Centennial. My family has been property owners since I was a teenager in that area; and I feel that some of the groups that and individuals from outside of our community have been telling us what we need and what we can't have to enhance our lives in the antelope valley. Centennial has worked directly with the community and outside interest for years. They have had an open and honest about the nature of the project. They have addressed concerns when they were brought up. This project will go a long way to stifling what I call rural sprawl which is what's been going on in the area. Rural sprawl provides little or nothing with regards to infrastructure needs in the area and services. Centennial will fulfill those needs. They are going to provide the infrastructure and services that the community is crying for. In addition, the Tejon Ranch has created approximately 240,000 acres of habitat and open space in a conservancy. A 240,000 acred gift to us, the public. They didn't have to do	Thank you for your participation in this public process. The Commenter's support for the Project was heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR and, therefore, no further response is required.

Testimony No.	Environmental Topic	Testimony	Response to Testimony
		that. I don't know of any other place in the State of California that has ever gotten that kind of a concession from a developer. After many years of attending multiple hearings and I urge you, the commission, to approve this project so that centennial can do what is needed for the county and for the community. Thank you very much.	
J.P. Rose			
RPC-377	Biology Miscellaneous	Good morning, Commissioners, my name is Jay Rose, I'm an Attorney for the Center of Biological Diversity. The Center has about 5,000 members in Los Angeles County. I was taking a look today at a PowerPoint on today's shareholder meeting and looked at what Tejon is up to today and there are 55 miles of rock and California land. Monetizing tens of thousands of acres of raw California land. Calling it raw cal land, I call It California's natural heritage and wild land fields and the home that animals call home. These rare California landscapes need to be protect for everyone and not monetized for a few. To monetize tens of thousands of raw acres of land will come to a huge cost to the rest of us.	Thank you for your participation in this public process. The Commenter's opposition to the Project and preference for preservation of the Project site is noted, was heard by the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. The Project region is an important ecological region, but preservation of thousands of acres of important biological resources is an objective of the Project, and the proposed 43,080-acre mitigation preserve system contains all major habitat types affected by the Project, as well as particular individual biological resource values. (Draft EIR, page 4-4; Response to Testimony RPC-219) The biological value of the proposed preserve system is further enhanced by its continuity with other open space areas. While it is acknowledged that the Project site occurs within this important ecozone, vast swaths of biologically rich land are preserved through the Project's mitigation process. This testimony does not address the adequacy of the EIR, and no further response is required.
RPC-378	Fire Safety	One of those costs is fire. We have seen in the news California is experienced the worse fires on record. We can limit the severity of these fires by not building in high fire hazard areas. However, that is exactly that is proposed here. Centennial will be twice the size of Santa Monica on an area that is at risk for very high wildfires and this will result in damage and fire cost.	The Commenter's opinion is noted, was heard by the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. With regard to fire risk and fire services, please see Draft EIR Sections 5.3, Hazards and Fire Safety, and 5.16, Fire and Law Enforcement; and Final EIR, response to Comment A.2-6 and Response to Testimony RPC-339.

Testimony No.	Environmental Topic	Testimony	Response to Testimony
RPC-379	Population/ Housing Transportation/ Traffic	Approving this development is the epitome of reckless planning. We can't keep repeating this mistake. We know this is a Pipe dream. The Los Angeles Times reports that even in Santa Clarita, 75% of the residents commute out where only 25% work in the city. If Santa Clarita can't achieve this housing balance, do you really think we are going to achieve this balance farther north of Santa Clarita? I think we won't. This is not going to alleviate the housing crisis. We have housing crisis where people need to live and work. People have a difficulty getting to their jobs. This project will net a $38 million expansion of the freeway. Who is going to pay for that? All of us.	The Commenter's opinion with regard to jobs/housing balance and housing needs is noted, was heard by the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. However, the County disagrees with the Commenter. The Project is designed with a balanced land use plan, as discussed in depth in Final EIR, response to Comment F.8-20, which provides significant environmental benefits including providing a beneficial jobs/housing balance. As designed, the Project would reduce reliance on single-occupancy vehicles by creating a series of mixed-use villages linked by streets, transit, and pedestrian and bicycle trails. This land use pattern will provide convenient access to shopping, employment, schools, professional services and parks. Each village would contain a village core, neighborhood center or town center comprised of higher-density housing, with more intensive commercial and business park uses located closest to State Route 138 (SR-138) in order to utilize freeway exposure and support efficient transportation patterns. The Project would also help meet needs based on estimated future growth in Los Angeles County. The Commenter provides no evidence to support the assertion that the Project will not help meet the County's jobs/housing balance goals, and no further response is required. With regard to the Project's relationship to the Northwest 138 Improvement Project, please see response to Comment ADD-F.10-5.
RPC-380	Miscellaneous	It's a project that could have happened in the urban core. It is completely within your discretion and authority to advise the board against this project and perhaps county counsel can elaborate on that further. This is one of the biggest decisions you will ever face as voters and this will have repercussions for thousands of years. I beg you to say no to this boondoggle of a development.	The Commenter's preference for a different location for development, and opposition to the Project, were heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. This testimony does not address the adequacy of the EIR, and no further response is required.

Testimony No.	Environmental Topic	Testimony	Response to Testimony
Katherine			
RPC-381	Biology	Good morning, Chairman Louie and Commissioners. I'm Katherine and I am opposed to this project. The DEIR has failed to prove the movement to the California mountain lion. Given the following that Tejon Ranch has been find for the illegal killing of at least 11 mountain lions possibly 20. Second that my point lions require extensive roaming space and linkages and third that open space has increasingly fragmented and degraded and the California aqueduct and the I- 5 freeway and the 138 due to be enlarged present large animals with dangerous and impassable areas to movement. Because of those, there is no excuse of the D EIR for specific and thorough assessment of the needs of the mountain lion. Certainly we do not want to be responsible for the lack of diversity seen in the Santa Ana Mountains and Santa Monica Mountains. According to a report in 2017, the puma's isolation is due to primarily this urbanization from Los Angeles to San Diego. This is a required wildlife for an exchange and yet it argues for this larger development that includes parts of the home range. It's rationalizing logic assumes massive development first and then justifies it with a dense design with hardened edges that limit corridors. It states "wildlife and plant diversity is nearly always enhanced by the maintenance of naturally occurring open linkages". But it argues that the 3-man-made barriers already compromise the movement of the habitat with this infrastructure it will not really matter because there is a linkage to the north of the foothills of the Tehachapis. And still, their deer, bobcat, mountain lions are found to frequent the area immediately	Thank you for your participation in this public process. This testimony, including the Commenter's opposition to the Project, has been heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. The County first notes that the mountain lion is not threatened or endangered in California – rather, its population is relatively high in California and their numbers appear to be stable, as reported by the California Department of Fish and Wildlife.[3398] The formal status of the mountain lion, as listed by CDFW is "specially protected species". This status was initiated by Proposition 117 in 1990, making mountain lion hunting illegal in California, and is not related to rarity or habitat loss. Because the mountain lion is not considered a special status species, direct impacts to the mountain lion and impacts to mountain lion habitat did not warrant lengthy discussion in the EIR. The EIR appropriately considers mountain lions as part of its wildlife movement discussion on pages 5.7-56 through 5.7-64 of the EIR. With regard to wildlife linkages, and potential barriers to those linkages, please see Draft EIR pages 5.7-52 through 5.7-64, and 5.7-164 through 5.7-166, as well as Final EIR, response to Comment F.5-13. As noted in the Draft EIR, potentially significant impacts to wildlife movement and habitat for general wildlife that would result from implementing the Project would be reduced to less than significant levels with implementation of MMs 7-14 through 7-18. With regard to illegal killing of mountain lions, it is not Tejon Ranch policy to do so. As indicated in the article referenced by the Commenter, the Applicant has publicly explained that it expresses "deep regret that such incidents took place on ranch property and the company is doing everything within its power to ensure that something like this never happens again." Further, the killings "occurred without the knowledge and/or consent of Tejon Ranch's senior officers."

[3398] https://www.wildlife.ca.gov/conservation/mammals/mountain-lion/faq#359951240-are-mountains-lions-listed-as-a-threatened-or-endangered-species.

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		north of the 138 and to the east in the eastern part of the project. The D EIR admits it will have logic for movement. This will not serve the needs for the large animals who tend to use the southeast. We must step back and look at this urban project. It's not only that 12,000 acres of wilderness will be lost, but the location is isolated and pivotal. Where we could not mitigate for vast destruction of open space, we Californians lose our precious legacy, thank you.	
Ricardo			
RPC-382	Support	Good morning, Commissioners, my name is Ricardo. We represent 400 businesses and non-profits at Los Angeles County. I'm here to urge you to support this important housing crisis that Los Angeles County continues to face. California has a tremendous housing deficit and that includes the lack of production of homes. This is driving the cost of homes and apartments and pushing out working and middle-class families and making it difficult for businesses to attract and retain talent. The only way to get out of the housing crisis is simply by building more. The Tejon Ranch community is taking steps to afford this project today. It will include the planned region for our population and growth in our county. Centennial will provide over 19,000 homes and create 300,000 jobs for the county of Los Angeles. It will transform the region into a vital community and hub. It will generate $25 million of revenue for our county and continue to improve our counties, creating the neighborhoods and we could not continue to do more with housing. Thank you.	Thank you for your participation in this public process. The Commenter's support for the Project was heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR and, therefore, no further response is required.

Testimony No.	Environmental Topic	Testimony	Response to Testimony
Susan			
RPC-383	Miscellaneous	I'm Susan, representative of the Mountain Council. We are bordered by the north for the Centennial project and south of the national forest. I want to say that the Antelope Valley Area Plan says that our community is remote and we should not have the expectation of services of our infrastructure. This project is right next door to us; yet, the development isn't considered remote. They are going to create something that isn't remote within their own community. But in the outlying areas. Something else I wanted to touch on is for about 8 years, our town council and me as the representative worked with the town and country outreach plan for the Antelope Valley Area Plan. In the last stretch of the planning process before it went to your Board and the Board of Supervisors, outside interest like developers, I felt and this is my opinion, influenced the plan and caused what I see as a conflict of the rural preservation strategy and this development and the land use development imposed by this planning process. It is deeply concerning that what I have contributed at the last meeting pretty much disappeared. Growth is directed to rural town centers and communities whether it's commercial or housing. The rural preservation strategy is meant to protect residents in outlying areas by decreasing density and lower risk to many residents. This community proposed is going to be highly dense and an area of special hazards management previously mentioned by others.	Thank you for your participation in this public process. This testimony was heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. The County disagrees with the Commenter's characterization of the Project, and notes that it has been sited and designed to promote regional "smart growth" planning principles established by the Southern California Association of Governments' (SCAG) 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy and the County's Antelope Valley Area Plan (AVAP) for the purpose of accommodating regional growth projections in a sustainable manner that reduces criteria air pollutant and greenhouse gas emissions and promotes public health while protecting regional open space, Sensitive Ecological Areas and agricultural areas consistent with the AVAP's Rural Preservation Strategy. Please see Final EIR, response to Comment F.8-20 for further discussion. The Commenter's opinions about the AVAP planning process are noted, but this does not address the adequacy of the EIR, and no further response is required.
RPC-384	Biology Fire Safety	It's in a major regional wildlife corridor. It's condor territory. Conservation agreement with the ranch allows hunting. There is no refuge for the wildlife as a result of this project. It's mountain lion territory and because of the previous actions, it's kind of hard to trust what the	The Commenter's opinion with regard to impacts to biological resource is noted, was considered by the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. However, the County disagrees. The EIR thoroughly and appropriately analyzes Project-related impacts in all areas noted by the Commenter and identifies mitigation measures to avoid or substantially lessen impacts to the extent feasible. For

Testimony No.	Environmental Topic	Testimony	Response to Testimony
		Conservancy is going to do and protect the wildlife in the community. It's part of an Audubon bird area and holds rare native plants and grass lands and oak wild lands. I predict now that the oak grove national forest directly to our south will burn because of a result of urban wildlife interface development. I used a term in my July letter to the Board here, the this project because the wild land communities are pretty much steam rolled.	more specific discussion with regard to wildlife movement, please see Final EIR, responses to Comments B.4-56, B.4-57, F.5-13, F.7-21, F.8-109, F.8-110, and F.8-168. With regard to condors, please see Response to Testimony RPC-197, Final EIR, responses to Comments B.4-20 to B.4-23 and F.8-138 to F.8-143. With regard to hunting, please see Response to Testimony RPC-170. With regard to mountain lions, please see Response to Testimony RPC-381. With regard to birds, please see Response to Testimony RPC-14. With regard to plant preservation and impacts, including grasslands and oaks, please see Response to Testimony RPC-12, Final EIR, responses to Comments F.8-128 to F.8-131 (plants); Final EIR responses to Comments B.4-17, B.4-43, B.4-63, F.7-22, F.8-124, F.8-125, F.8-127, F.8-128, and F.8-131 (grasslands and wildflowers); and Final EIR responses to Comments A.2-7, B.4-50, B.4-41, and F.8-132 through F.8-125 (oaks and oak woodlands). With regard to fire-related impacts, please see Response to Testimony RPC-339. With regard to the Oak Grove area in Cleveland National Forest, this testimony is noted, but Cleveland National Forest is not in the Project site area and impacts there are unrelated to the Project.
RPC-385	Conclusion	I can't finish now. I just want you to consider that term "Manifest Destiny", you guys can control this destiny and I urge you to say no.	The Commenter's opposition to the Project is noted, was considered by the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. This testimony does not address the adequacy of the EIR, and no further response is required.
Dr. Nick Jenson			
RPC-386	Population/ Housing	Thank you very much for your time. My name is Dr. Nick Janson, the story references the need to build housing in Los Angeles County. I think we all agree that Los Angeles County needs real and thoughtful solutions to our housing crisis. These solutions need to align with California's values rather than us choosing leapfrog development close to job centers. This group I have been involved with has submitted hours of public testimony. Source after source point to the conclusion that centennial is a fatally flawed project. I would like to expand on a couple reasons why. First, with only 10% affordable housing and no reasonable public transit Centennial will not help to solve our housing crisis. The project will create three low paying jobs for every moderate to high paying job. This means, I	Thank you for your participation in this public process. The Commenter's opposition to the Project and desire for a larger amount of affordable housing was heard by the Regional Planning Commission and will be provided to the Board of Supervisors. However, the County disagrees with the Commenter's characterization of the Project. For further discussion of the Project's balanced land use patterns, jobs and housing, and in-depth refutation of the assertion that the Project constitutes leapfrog development, please see Final EIR, response to Comment F.8-20. The Project's land use plan would provide an estimated jobs/housing ratio of 1.22 through the development of commercial and business park uses on the site, thus positively contributing to the attainment of the AVAP's targeted jobs-to-housing ratio. As explained in EIR Section 5.9.3 (pages 5.9-18 through 5.9-22, and pages 5.9-29 through 5.9-30), job assumptions are appropriately based on regional employment growth projections published by the Southern California Association of Governments (SCAG), which SCAG adopted as part of its 2012 and 2016 Regional Transportation Plan/Sustainable Communities

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		ask the question, where will people working these low paying jobs live if there is not enough affordable housing?	Strategy (RTP/SCS) planning documents. This testimony does not address the adequacy of the EIR or provide evidence to refute EIR assumptions, and no further response is required.
RPC-387	Transportation/ Traffic	Will they commute to Centennial from Bakersfield or Lancaster or Santa Clarita? We know because of all other communities that have been developed in California and this development will be no different that 75 to 85% of future residents will commute to where they currently have jobs. This means one way commutes of 35 miles to Santa Clarita, 50 to Bakersfield, 45 to Lancaster, 65 to Downtown Los Angeles. These commutes will cost residents $12,000 to $17,000 per year in fuel, vehicle maintenance, health expenses and other sternalities. Can any housing on centennial be affordable.	The Commenter's opinion and information about commute costs is noted, was heard by the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. The EIR's trip analysis meets CEQA requirements. As discussed in more detail in Final EIR, response to Comment F.8-23, Draft EIR page 5.10-91 explains that the traffic analysis assumes that a portion of the Project workforce and resident population will live or work outside the Project area and will commute to jobs outside or within the Centennial Specific Plan area. The analysis also assumes that on-site residents and workers will travel for services and amenities outside of the Project. The proportion of internal and external Project area trips was derived from the North County Sub-Area Traffic Model updated by Los Angeles County to reflect the Antelope Valley Area Plan approved by the County in June 2015. The North County Sub-Area Traffic Model used for the Project analysis is the same model used by the County and other public agencies for transportation planning studies in the region, including the 2015 Antelope Valley Area Plan (AVAP) and County General Plan update EIRs. The model was also used by Caltrans in the preparation of the Northwest State Route 138 Corridor Improvement Project Final EIR/EIS. With regard to Project trip length, as discussed on Draft EIR page 5.10-51, the North County Sub-Area Model results show that 40 percent of the trips made on site would be 3 miles or less in length, and nearly 70 percent of all internal trips would be 4 miles or less. As shown on Table 3.8 of the traffic study (Draft EIR Appendix 5.10-A), the North County Sub-Area Model results estimate that, on average, each internal Project trip will be 3.4 miles in length. The model estimates that an average external trip will be 45.9 miles in length. Finally, the North County Sub-Area Model estimates that 48 percent of all trips will be internal and 52 percent of all trips will be external to the Project. Consequently, the average Project trip is estimated to be 25.5 miles in length. As discussed on page 3-9 of Draft EIR Appendix 5.10-A, these estimated trip lengths are conservative because they do not reflect the trip reduction measures being implemented by the Project that will encourage trips by walking, biking, and transit. The Commenter provides no evidence to refute EIR analysis, and no further response is required.

Testimony No.	Environmental Topic	Testimony	Response to Testimony
RPC-388	Biology	Second, it could not inhabit ate or allowed on Centennial. This is destroying the wildlife. This shows in the heat of summer in the drought year, these photos and the photos shown during the presentation to this commission, failed to do justice to the beauty and ecological value of this site. We are not going to stand by and allow for this misrepresentation. Will those of you in the audience show the beautiful views of Tejon Ranch. Thank you, guys.	The Commenter's opinion that the EIR and County staff did not adequately discuss the beauty and ecological value of the Project site is noted, was heard by the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. The County disagrees and notes that the EIR thoroughly and appropriately discusses the Project site's existing environmental conditions in Draft EIR Section 3.0, Environmental Setting. Impacts to site's visual resources are discussed in Section 5.13, Visual Resources, and the site's ecological value and Project impacts to biological resources are thoroughly discussed in Section 5.7, Biological Resources. This testimony does not provide evidence of any inadequate discussion or analysis, and no further response is required.
RPC-389	General	You will hear and already heard many of the testimonies today about why this project should not be allowed to proceed. This includes a whole list of things, fire danger and earthquakes, the list is huge, right? But I would like to finish today in the time allotted with a quote from the LA Times article that admits the Centennial looks and isolated and out there. Finally we have found something that we can all agree upon. Thanks for your time.	The Commenter's opposition to the Project was considered by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. With regard to fire, please see Response to Testimony RPC-339. With regard to earthquakes, please see Response to Testimony RPC-330. This testimony does not address the adequacy of the EIR, and no further response is required.
Ash Loft			
RPC-390	Sprawl Fiscal Impacts	Thank you, Commissioners, my name is Ash Loft, a community organizer with the Center for Biological Diversity. We have over 35,000 members in Los Angeles County. I would sincerely thank each of you for your time in these hearings. I will submit 3 points as to why you should reject this. That is protecting wildlife and promoting housing. This is for transit and affordable housing where people already work and need homes. Transit is the economic driver in California and producing 75% long commutes and pollution and affecting California's climate goals and requires the public to spend on infrastructure including roads and fire stations and exposes the	Thank you for your participation in this public process. This testimony has been considered by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. However, the County disagrees with the Commenter's characterization of the Project. The Project has been sited and designed to promote regional "smart growth" planning principles established by the Southern California Association of Governments' (SCAG) 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy and the County's Antelope Valley Area Plan (AVAP) for the purpose of accommodating regional growth projections in a sustainable manner that reduces criteria air pollutant and greenhouse gas emissions and promotes public health while protecting regional open space, Sensitive Ecological Areas and agricultural areas consistent with the AVAP's Rural Preservation Strategy. For further discussion and an in-depth refutation of the assertion that the Project constitutes or contributes to sprawl or leapfrog

Testimony No.	Environmental Topic	Testimony	Response to Testimony
		valley to a high area of infrastructure. We need to build housing in a way that addresses displacement and access and sustainablity and climate change. It's disingenuous to call this affordable housing and relative to a public shifting narrative. Isolated leapfrog development undermines this entire California area by increasing traffic and requiring more public spending on infrastructure and risking air pollution. The average commuter spends $1400 every year because of sprawl. If approved, Centennial would increase the cost to Los Angeles County. Our limited funds should be directed to improving records and infrastructure and existing communities, not for supporting leapfrog development. Because Centennial fails to provide affordable housing that provides sustainable access to social, educational and transit economic resources. We believe this project should be rejected.	development, please see Final EIR, response to Comment F.8-20. With regard to sustainability, walkability, and reduction of vehicle miles traveled through project design and transportation demand management, please see Final EIR, responses to Comments F.8-20, F.8-204, and Sections 3.2 and Appendix 2-C, Mobility Plan to the Centennial Specific Plan (Final EIR, Appendix 4.0-A.Rev). With regard to fiscal impacts, the County disagrees with the Commenter about impacts to Los Angeles County. As discussed in the Draft EIR, such as in Section 5.16 Fire and Law Enforcement and Section 5.17, Other Public Services, the Project is responsible for providing infrastructure and services and would not create negative fiscal impacts on surrounding communities.
RPC-391	Fire Safety	If we want to keep Californians safe, we can no longer ignore warning signs of imminent fire risk. Building development in fire proned areas will only lead to disaster. Total cost of fire suppression in fire county area in 2016-2018 is $6.6 billion. It was an estimated $12 billion in insurance claims in 2017. That would mean that $18.6 billion in wildfire cost in 2016 and 2017 which is an increase and is pretty astounding. These costs are loud and clear and we need to discourage development in high fire areas. This is why over 35,000 members request you reject this project. Thank you.	With regard to fire-related impacts, please see Response to Testimony RPC-339. This testimony does not directly address the EIR, and no further response is required. The Commenter's opposition to the Project was heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration.

Testimony No.	Environmental Topic	Testimony	Response to Testimony
Tom Eggen			
RPC-392	Biology Fire Safety	My name is Tom Eggen. For defenders members for wildlife. Defenders members are dedicated to protect wildlife and communities and navigate ground solutions for biological diversity. Habitat diversity and wild land loss. I'm here to speak for the Centennial project foreman I would specifically add on to the previous comment this morning relative to the overall revisiting of the overarching vision of the entire housing project. In looking at the documents and there have been plenty of them, we see very little coordination to the conservation investment strategy. This has been going on for a couple years now and it eight critical component to this planet that we struggle to get the ranch folks involved in and they refuse to date to do that. This involves all the areas and not just the Centennial housing project and we really think that needs to be revisited. And management to proposed areas for proposed live stock really needs to be revisited particularly in the climate change and the incredible wildlife and wildfire risk out there. There are ways to increase the wildfire potential. The proposed Centennial project will be also be in the heart of the California designated area for the California condor. A true endangered species. We got this animal from 27 birds before they were removed from the wild to over 400 birds now with more birds in the wild today than captivity. A true success story. This project is going to be located in the heart of this recovery zone. With this development, led sources are going to impede the recovery of this. One of the most truly iconic birds in our nation. We encourage you to oppose this Centennial project. Thank you.	Thank you for your participation in this public process. The Commenter's opposition to the Project, opinion that Tejon Ranch has not been responsive to their desires, and preference for a different planning vision were heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. Specifically, with regard to the California condor, the EIR concludes after thorough and appropriate analysis that impacts would be less than significant, which would be further ensured by MM 7-6. For further discussion of condor, please see Draft EIR, Section 5.7, pages 5.7-94, -119, and -120, -148 and Final EIR, responses to Comments B.4-20 to B.4-23 and F.8-138 to F.8-143. With regard to the Regional Conservation Investing Strategy (RCIS) referred to by commenter, it is a pilot program authorized by Assembly Bill 2087 (2016), and the County fully addressed how it relates to the Project in Final EIR, responses to Comments F.8-172 and F.8-172A. With regard to wildfire, please see Response to Testimony RPC-338. This testimony does not provide evidence disputing EIR analysis, and no further response is required.

Testimony No.	Environmental Topic	Testimony	Response to Testimony
Justin			
RPC-393	Support	I'm Justin, for the corporation, a large union contractor in the State of California. I'm currently running projects from the San Diego border to the Oregon border. I have spent a tremendous amount of time on the 5 freeway going from one state to the other. I'm here to speak today a little bit more about the construction of this industry rather than the habitat and the wildlife. Currently I'm running 300 employees. I'm a 40-year resident of the Antelope Valley myself. Our business has been there for 44 years. Currently in the Antelope Valley itself we have three affordable housing projects going. One is a veterans and senior center. I'm very informed about that side of the discussion today. More important for me, I do have a heart. I live on a horse ranch and I have cattle and two desert tortoises on my ranch. I respect people's opinions and stuff like that, but as a young business owner with an eight-month-old son, I can't help but worry about the people of the State of California and the needs for people to be able to own a home and the needs for people to have jobs close to their home that they have now. The majority of my employees spend half their week driving. It took me 4 hours to get here this morning, 77 miles. I think we are taking mothers and fathers away from their families. I think we are seeing a lot of people injured in car accidents and things that a project like this can prevent a lot of that. I can't help but be more concerned about the human race than about flowers. I would ask that the, that everybody in this room will look at the dates of some of these pictures to date. I drive by that land on a daily basis. Those photos is not a direct reality of what it is today. We heard from the nice lady from Gorman and the need for the fire departments and the police departments and things like that. If you actually live in this area and function in that area,	Thank you for your participation in this public process. The Commenter's support for the Project was heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR and, therefore, no further response is required.

Testimony No.	Environmental Topic	Testimony	Response to Testimony
		there is a need for a lot of that stuff. There is hundreds of places where we are go for smelling flowers. But the reality is we need homes, parks, gas stations, we need all of that stuff in this area. I would like everybody to be very open minded about the amount of jobs and the other opportunities for family life that this project will create versus what we are going to ruin. I think that we are going to create a lot more good than what we are going to ruin. That's my stance here today and thanks for hearing me.	
No name provided			
RPC-394	Support	Good morning, we are working on the homeland of the Centennial project. The work done to date by the Planning Commission itself and your County staff and shown as centennial as a model is extremely impressive. Thank you for your hard work to date on this. Centennial will be a community that creates jobs right in the community and presents the health and wildlife style of the residents and will permit the open space. According to the McKinley global institute, the state needs to build over 3 million houses. An agreement with the previous speaker. I appreciate his passion and sincerity. Being able to put a human face on the housing crisis is even more important for us to provide housing for those that have been left out of the dream of home ownership. The future families who will 1 day call Centennial their own home is why we are here today. We have been building homes for future generations and we are in full support of this successful project. I applaud each of you for your thoughtful work today regarding the Centennial plan and I encourage you today to bring this project forward to the Board of Supervisors today.	Thank you for your participation in this public process. The Commenter's support for the Project was heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR and, therefore, no further response is required.

Testimony No.	Environmental Topic	Testimony	Response to Testimony
		Thank you once again.	
Roslyn			
RPC-395	Biology Population/ Housing Sprawl	My name is Roslyn, I grew up in similar I valley. I don't think the question is whether we build or whether we seek to provide jobs, but whether we build the right way and provide the right kinds of jobs and the right kinds of job opportunities. Right now we are in a crisis in California. We rely in a healthy overall ecosystem for healthy people. I would say is this development is about and opposing this development is about keeping people healthy and supporting the right kinds of jobs of supportive housing that is more in fill and not far flung sprawl housing. And I think this has changed as to this housing that's being proposed. If you look at the region, there has been a very high amount of sprawl development across California region and you need to think about migrating animals for animals. They need 19 large areas in order to survive and thrive and be part of that healthy ecosystem but keeps us healthy too. When we approve projects like this, it's at this point that is one of many many projects that have been bit by bit encroaching on this healthy ecosystem across California. We need to be part of this solution instead of part of this encroachment. I have concerns that should we approve this project in this area that as the years go by and the population in that area expands because of this project, we would be looking at pressures to start approving new developments in the area and increase the encroachment into new critical habitat. Thank you.	Thank you for your participation in this public process. The Commenter's opposition to and opinion about the Project was considered by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. However, the County disagrees with the Commenter's characterization of the Project. The Project has been sited and designed to promote regional "smart growth" planning principles established by the Southern California Association of Governments' (SCAG) 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy and the County's Antelope Valley Area Plan (AVAP) for the purpose of accommodating regional growth projections in a sustainable manner that reduces criteria air pollutant and greenhouse gas emissions and promotes public health while protecting regional open space, Sensitive Ecological Areas and agricultural areas consistent with the AVAP's Rural Preservation Strategy. For further discussion and an in-depth refutation of the assertion that the Project constitutes or contributes to sprawl or leapfrog development, please see Final EIR, response to Comment F.8-20. With regard to sustainability, walkability, and reduction of vehicle miles traveled through project design and transportation demand management, please see Final EIR, responses to Comments F.8-20 and F.8-204, and Section 3.2 and Appendix 2-C, Mobility Plan, to the Centennial Specific Plan (Final EIR, Appendix 4.0-A.Rev). With regard to potential growth-inducing Project impacts, the Draft EIR conservatively concludes that the existence of the Project makes it reasonably foreseeable that additional development proposals seeking AVAP amendments could be made outside the West EOA, which is considered a significant, adverse indirect growth-inducing impact. Draft EIR, Section 7.0, Cumulative Impacts, pages 7-19, and Section 6.0, Growth-Inducing Impacts, pages 6-6 to 6-9. For further discussion of growth-inducing impacts, see Draft EIR, Section 6.0, Growth-Inducing Impacts, and Final EIR, responses to Comments F.8-47 through F.8-49. With regard to use of the Project site by large mammals who have large home ranges, the Commenter's concerns about habitat loss are addressed in Final EIR, responses to Comments F.8-107 and F.8-108, and discussions about foraging/hunting of large mammals are addressed on pages 5.7-50, 5.7-63 and 5.7-64 of the Draft EIR. Life history requirements of large

Testimony No.	Environmental Topic	Testimony	Response to Testimony
			mammals such as the mountain lion, while not discussed for specific species, is a topic covered in the movement discussion on pages 5.7-56 through 5.7-64 of the Draft EIR, and concerns about wildlife movement/linkages are addressed on pages 5.7-56 through 5.7-64 of the Draft EIR as well as responses to Comments B.4-56, B.4-57, F.5-13, F.7-21, F.8-109, F.8-110, and F.8-168 of the Final EIR This testimony does not directly address the EIR, and no further response is required.
Rose Bryant			
RPC-396	Biology	I'm here -- hello, I'm Rose Bryant. I want to talk about the Quayle Lake Wildlife Habitat. It's on the western part of the Antelope Valley. I'm sure you are all familiar with it. We sent you an e-mail on this pamphlet that we have that we are trying to alert you to all the animals and birds that reside in these areas or that are travelers and come from north to south and south to north. This project that wants to build and I'm actually proposing an alternative for that area for the western Antelope Valley. We had sent several or we considered a lot of alternatives that if you do pass this project that you consider that very seriously if you are going to pass this. I want to read you the last paragraph of this pamphlet because I think it is important. "although the building of the Centennial city will do damage to the part of California and will have far reaching echo effects on California. It will at least limit the damage to east of the aqueduct. It would preserve the important grassland hill habitat north of Quayle Lake where the county black forest and will allow Quayle Lake to continue to function as an independent feeding ground to migratory rest stop for many species of birds." . This includes all the animals that come from the hills and mountains that actually drink water there.	Thank you for your participation in this public process. In this testimony, the Commenter refers to a letter and corresponding pamphlet the County received on August 15, 2018, and which was provided to the Regional Planning Commission for consideration. This correspondence and responses to it appear in the document entitled The Centennial Specific Plan Project, Project No. 02-232(5), Responses to Additional Correspondence Received Through August 22, 2018, available at the Los Angeles County Planning Department and online – this response addresses the Commenter's testimony about Quail Lake and attendant biological resources.[3399] Please see Letter ADD-F.15, and response to Comment ADD-F.15-1. Specifically, with regard to the Commenter's preference for Alternative E, the Commenter's preference is noted and will be provided to the Regional Planning Commission and Board of Supervisors for consideration. The Commenter has previously expressed this preference in much more detail, and the County has responded appropriately. For detailed responses, please see Responses to Testimony RPC-70 through RPC-74, and responses to Comments ADD-F.13-2 through ADD-F.13-8. With regard to human interference with wildlife, it is reasonably assumed that Project residents will follow any legal mandates with regard to wildlife protection. Further, the EIR appropriately analyzes all potential Project-related impacts on biological resources, including with regard to human intervention, and mitigates them with feasible mitigation measures. This testimony does not provide specific evidence of inadequate EIR analysis, and there is no further response required.

[3399] Available at: http://planning.lacounty.gov/assets/upl/case/sp_02-232_pm060022-20180829-correspondence.pdf.

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		I have seen them. I used to run that area every single day and I would pass by all of these animals that would come into that area. I thought it was really incredible that they had it for the animals. I know that everybody thinks we should eliminate them all because everybody is killing them up there. You know, even snakes, whether they are rattlers or not, they are eliminating them. My neighbors think that killing 35-40 snakes a year is pretty good, this is really nice, and that they are poisoning all the rest of their animals because they are encroaching on their particular housing. It makes it really unfortunate that we have to even build in these beautiful areas. But, if you are going to do that, let's put it down. Make it smaller. I know that smaller isn't what they want, but I think that is what would be very important.	
RPC-397	Water Resources	Also, I want to say that going to water because water is very important to all of us there in the Antelope Valley. Is that unless you have guaranteed 30 years of water to be able to build even a portion of this development.	With regard to water supply for the Project, after thorough analysis, the EIR appropriately concludes that Project water supplies will sustainably meet buildout potable and recycled water demands and would in fact maintain an average annual reserve supply in the two Project water banking facilities of more than 79,000 acre-feet after buildout has been achieved. This surplus would persist over time based on an 82-year hydrologic period of record, including single-dry and multiple-dry years, and taking account of potential climate change impacts. Please see Draft EIR, Section 5.18, Water Resources, and Response to Testimony RPC-76 for further discussion.
RPC-398	Conclusion	Yes, I will wrap that up. Hopefully you can look at that and consider it very seriously. I really appreciate this Commission, by the way, as we deal with the Tricounty and Kern County and Ventura County and LA. You are the best, I must say, thank you.	The Regional Planning Commission heard this testimony and will consider it. It will also be passed on to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR, and no further response is required.

Testimony No.	Environmental Topic	Testimony	Response to Testimony
Leslie			
RPC-399	Miscellaneous	I'm Leslie. I would like to speak to something Chairman Louie brought up and I don't have an actual definitive answer, but in terms of the settlement agreements by several of the environmental groups including the Sierra Club which I am a member but I'm not here as a Sierra Club member at all. My understanding is that a settlement agreement preserve a relative large portion of Tejon Ranch and in exchange partly these groups were not going to oppose other development portions of Tejon Ranch. It doesn't mean that they support it by a long shot. I think it just means that they can't actively publically oppose them. So I just wanted to try to speak to that a little bit.	Thank you for your participation in this public process. This testimony has been considered by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. As noted by the Commenter, signatories to the 2008 Tejon Ranch Conservation and Land Use Agreement ("Ranchwide Agreement" or "RWA") agreed not to oppose four Tejon Ranch development projects, including the Centennial Project, after years of cooperative study and identification of the most appropriate respective locations for preservation and development. Per RWA recitals, "[t]he long-term conservation of Tejon Ranch has been one of the highest priorities" of the signatory organizations, and the agreement "follows many years of scientific analysis of conservation values on Tejon Ranch by TRC and others, including the Resource Organizations." This testimony does not address the Project or the adequacy of the EIR, and no further response is required.
RPC-400	Biology	And I had set something earlier about in the former hearing about raising the issue of this State, developing its plan for maintaining and preserving natural lands that is important for sequestration. The County's response basically said they were going to be planting a lot more trees, so that would address that issue. I don't know that planting trees is the same as maintaining this natural open space and working lands that are very historic and very important for many other reasons that people have spoken about for wildlife as well.	The Commenter correctly notes that the Project would result in the conversion of some vegetative cover that currently sequesters carbon. As the County previously explained in response to the Commenter's previous testimony, at Response to Testimony RPC-307, this is appropriately disclosed and analyzed in Draft EIR Section 5.21, Climate Change (pages 5.21-5 and -50). It should be noted, however, that the Project would plant an estimated 35,123 new trees, as required by the County Tree Planting Ordinance, which would result in an estimated long-term sequestration of 24,867 metric tons of carbon dioxide equivalent, as discussed on Draft EIR page 5.21-83. The Commenter's opposition to the Project due to loss of vegetative cover, and preference for preservation of the Project site, was heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. This testimony provides no evidence refuting EIR analysis or conclusions, and no further response is required.
RPC-401	Air Quality Greenhouse Gases	I would like to bring up a few more points. In the greenhouse emissions to increase the eb in 20 years. I don't know if that is true or not, but I raise that as an issue. The LA valley AQMD apparently did not respond and possibly this is an issue to the adequacy of the EIR.	With regard to electric vehicle utilization, this testimony appears to refer to discussion in Attachment G – GHG Reduction Memo, to the July 11, 2018 Regional Planning Commission Public Hearing Staff Report ("GHG Memo"), which clearly explains its assumed increase in EV adoption rate from current 4 percent to 50 percent at the time of Project buildout. The current CalEEMod default value for EV use is approximately 4 percent of all vehicles, which does not reflect reasonably foreseeable future EV adoption rates

Testimony No.	Environmental Topic	Testimony	Response to Testimony
			based on ongoing public and private sector efforts to develop and deploy EV technologies and products.[3400] As discussed further in the GHG Memo, global projections in a Bloomberg New Energy Finance report indicate that by 2040, 55 percent of new car sales will be electric, and a University of California, Berkeley report estimates achieving up to 46 percent market share for EVs nationally by 2030. (GHG Memo, page 4). An International Monetary Fund working paper indicates that the share of EVs in national vehicle stock would be 30 percent by 2027, and by 2042 this would be over 90 percent. (*Ibid*.) Although these projections vary, they all point toward a much higher level of EV sales and adoption in the country in the near future. See GHG Memo, pages 4-5, for further discussion. The Commenter's concern regarding lack of AVAQMD (presumably the agency the commenter labeled "LA Valley AQMD") comments on the Draft EIR is noted and will be provided to the Regional Planning Commission and Board of Supervisors for consideration. AVAQMD does have an important role in the CEQA process for this Project. As described in Draft EIR Section 4.8, Intended Use of the EIR, the County is lead agency for the Project, and AVAQMD is a responsible agency. (Draft EIR, pages 4-102, -110.) Approximately 85 percent of the Project site lies within the Mojave Desert Air Basin, over which AVAQMD has jurisdiction for air quality. Developers and businesses who plan to install equipment with the potential to emit air pollutants, including toxic and hazardous air pollutants, must obtain permits from the applicable Air Quality Management District prior to construction or operation. Examples of businesses and equipment that require permits are gas stations, dry cleaners, emergency generators, boilers for heating and hot water in large buildings, restaurant cooking equipment, and manufacturing facilities. Accordingly, AVAQMD was provided with an opportunity to review the EIR and is expected to use the information in the EIR for consideration of approvals related to and involved in the implementation of the Project. This comment does not specifically address the Project or the adequacy of the EIR, and no further response is required.

[3400] See, e.g., CARB's 2018 Annual Evaluation of Fuel Cell Electric Vehicle Deployment & Hydrogen Fuel Station Network Development, available at: https://www.arb.ca.gov/msprog/zevprog/ab8/ab8_report_2018_print.pdf. As noted in this report, in just the 12 months of 2017, there was a significant shift in momentum of California's hydrogen fueling station network development and Fuel Cell Electric Vehicle (FCEV) development and deployment. Per Executive Order B-48-18, there is a target of 5 million ZEVs by 2030, and FCEVs are expected to comprise a significant portion of this future fleet. The California Fuel Cell Partnership anticipates 1 million FCEVs on the road by 2030

Testimony No.	Environmental Topic	Testimony	Response to Testimony
RPC-402	Fire Safety Water Resources	Other people raise the high wind and fire danger. I think it's very important now to address that differently, and readdress that. The adequacy of the water analysis related to the drought to my view is inadequate. And referring to water extraction that now has to be part of the plan. Another adequacy issue. I think it's the wrong development in the wrong place at the wrong time. Thank you.	The Commenter's opposition to the Project is noted, this testimony was considered by the Regional Planning, and will also be passed on to the Board of Supervisors for consideration. With regard to fire risk and fire services, please see Draft EIR Sections 5.3, Hazards and Fire Safety and 5.16, Fire and Law Enforcement, and Final EIR, response to Comment A.2-6 and Response to Testimony RPC-339. With regard to water supply analysis, including in drought conditions, please see Draft EIR, Section 5.18, Water Resources, and Responses to Testimony RPC-76, and RPC-209. This testimony does not provide specific criticisms of EIR analysis, and no further response is required.
RPC-403	Conclusion	Let me see what else did I want to say. Well, I don't know. I think I will just leave it at that. I think there are more appropriate places to develop and including the Antelope Valley itself where there has already been graded lands. Please consider this proposal and think about your responsibilities and in terms of long range planning. Thank you.	This testimony and the Commenter's opposition to the Project have been considered by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. With regard to the Commenter's preference for another location, the County notes that the Project site is planned for intensive development under the AVAP. This testimony does not address the adequacy of the EIR, and no further response is required.
George Dickerson			
RPC-404	Support	My name is George Dickerson. I'm going to read so I communicate everything I want and respect everybody's time. I have been a former valley resident for 27 years and I'm a former marine and own my own business in the Antelope Valley for the past 25 years. I spoke in support before at the remote location in Lancaster. Now I'm in full support of this project. I heard at the last hearing about transportation for construction workers and commuters. In the latest project commitment, they have committed this for local residents. This is what we need when they listen and respond to the needs. There is a lot of new homeowners who are very excited about this new town in the west and the valley. I know this because Im active with the chamber members and events in the Antelope Valley where we have discussed this project. When I discuss with dozens of homeowners, one of the	Thank you for your participation in this public process. The Commenter's support for the project was heard by the regional planning commission and will be provided to the board of supervisors for consideration. This comment does not address the adequacy of the EIR and, therefore, no further response is required.

Testimony No.	Environmental Topic	Testimony	Response to Testimony
		biggest challenges and concern is the lack of affordable housing for employees and especially for the lower middle-class. I support a couple veteran non-profits in the AV as well. They are looking for affordable housing which is their main focus and the purpose of getting out of the military and working at the Plant 42 and Edwards when they get out. We need housing and -- Centennial is a project that will be available and this will suit all the needs of the community including parks, civic center, medical and many other amenities. I have heard many of the concerns regarding natural habitat and ecological concerns. I'm an avid outdoors man. Also I served summers across the country for natural habitat. I do hear their concerns but satisfied that this is a historic land and many have heard these concerns. The last focus is my focus and many of families that live in California. And the reality is that many are losing their kids and grandparents to move out of the state. Hopefully my daughter can stay local 1 of the ways to housing for our future generations is to build housing that is affordable and sustainable for that practice. It's this consistent plan that produces water walk ability and preservation of local jobs and centennial with this economic growth. I don't know of any other project of this magnitude that has met and exceeded this. I'm impressed. I hope you will keep our generation in California. We need these houses and services. Thank you.	

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3.7 RESPONSES TO CORRESPONDENCE RECEIVED PRIOR TO DECEMBER 11, 2018 BOARD OF SUPERVISORS HEARING

All comment letters received by the County through October 28, 2018 have been included and responded to herein. Comments that raise environmental issues pertinent to the analysis presented in the EIR have been thoroughly addressed in these responses.

With respect to the new comments letters received, individual comments within the body of each letter have been identified and numbered. Brackets delineating the individual comments and a numeric identifier have been added to the right margin of the letter. Responses to each bracketed comment are included on the page(s) following each comment letter, and the electronic PDF file includes hyperlinks between the comment and the associated response to facilitate ease of review.

Table 3.7-1 below presents a summary listing of the additional comment letters received, including the commenting agency/individual; the assigned numbering for each comment letter; the date of the correspondence; and the page number where the comment letter can be found herein.

TABLE 3.7-1
ADDITIONAL LIST OF COMMENTERS

Comment Letter Category		Date of Correspondence	Follows Page Number
Letter No.	**Commenter**		
A. Federal Agencies			
-	-	-	-
B. State Agencies			
-	-	-	-
C. County Agencies			
-	-	-	-
D. Regional Agencies			
-	-	-	-
E. Local Agencies			
-	-	-	-
F. Organizations			
ADD-F.18	Golden State Gateway Coalition	August 21, 2018	3-508
ADD-F.19	Association of Rural Town Councils	August 23, 2018	3-510
ADD-F.20	Citizens for Los Angeles Wildlife	August 28, 2018	3-532
ADD-F.21	Southern California Edison	October 1, 2018	3-534
G. Individuals			
ADD-G.64	Form Letter 11 – Various Commenters	Various Dates	3-536
ADD-G.65	Form Letter 12 – Various Commenters	Various Dates	3-538
ADD-G.66	Form Letter 13 – Various Commenters	Various Dates	3-540

TABLE 3.7-1
ADDITIONAL LIST OF COMMENTERS

Comment Letter Category		Date of Correspondence	Follows Page Number
Letter No.	Commenter		
ADD-G.67	Andrea L. Bell, LCSW, SEP	August 22, 2018	3-542
ADD-G.68	Jacquelyn Chase	August 22, 2018	3-544
ADD-G.69	Jacquelyn Chase	August 22, 2018	3-546
ADD-G.70	Gregory Simon, Ph.D.	August 24, 2018	3-552
ADD-G.71	Ann Dorsey	August 25, 2018	3-558
ADD-G.72	Michael Hayes	August 28, 2018	3-566
ADD-G.73	Diana Coronado	August 28, 2018	3-568
ADD-G.74	Paul Edelman	August 28, 2018	3-570
ADD-G.75	Elizabeth Davidsohn	August 30, 2018	3-572
ADD-G.76	Ed Salisbury	August 28, 2018	3-574
ADD-G.77	Form Letter 14 – Various Commenters	Various Dates	3-576
ADD-G.78	Matthew Schmahl	October 24, 2018	3-578
ADD-G.79	Kathy Davis	October 14, 2018	3-580
ADD-G.80	Mark Waldner	October 23, 2018	3-584
ADD-G.81	Timothy Martinez	October 23, 2018	3-586
ADD-G.82	Form Letter 15 – Various Commenters	Various Dates	3-588

F. Organizations

CENTENNIAL

at TEJON RANCH

ADD-F.18

GOLDEN STATE gateway COALITION

A coalition of community and business leaders focused on the health and vitality of California's transportation backbone:
— Interstate 5 —

August 21, 2018

Los Angeles County Regional Planning Commission
320 West Temple Street
Los Angeles, CA 90012

RE: Centennial Specific Plan

Dear Commissioners:

The Golden State Gateway Coalition is a non-profit organization focused on improving roadway transportation in North Los Angeles County. Our current priorities include the Interstate 5 corridor and SR 138.

I am writing today to express the Coalition's support for a recommendation for approval of the Centennial Specific Plan Project.

In 2002, Centennial was a founding member of the Golden State Gateway Coalition. They later helped advance Interstate 5 improvements by voluntarily making a substantial contribution to the cost of environmental studies for the I-5 capacity enhancement project. Completed and planned improvements to the freeway in North Los Angeles County include truck climbing lanes through the Newhall Pass, 14 miles of carpool lanes from the I-5/SR14 interchange to Castaic, auxiliary lanes, soundwalls and widened bridges.

It is this type of forward thinking and commitment by the private sector - - Centennial and others - - in partnership with the County and State that will result in reduced traffic congestion, safer roads, cleaner air and more efficient freight movement.

Final design on the I-5 HOV lanes will be completed this year. Passage of LA County Measure M included $240 million for construction of I-5 improvements. Just last May the California Transportation Commission unanimously approved $247 million from the state's trade corridor enhancement program for I-5 construction. In June, a federal grant of $47 million was awarded for "chokepoint relief" in the I-5 corridor.

ADD-F.18-1

28042 Avenue Stanford, Unit E, Santa Clarita, CA 91355
Telephone (661) 775-0455 • Fax (661) 295-0692 • www.goldenstategateway.org

This is a significant project that will create thousands of good jobs and improve our quality of life in North County. This is an environmentally cleared, ready-to-go project. And Centennial helped make it happen. Construction is scheduled to begin next year.

The Gateway Coalition and Centennial also support the State Route 138 corridor improvement project. The planned SR138 improvements will not only accommodate anticipated economic growth, but also improve safety and goods movements for a critical North LA County roadway system consisting of I-5, SR-14, and the planned high desert corridor.

The environmental documents for SR-138 have already been approved and Metro and Caltrans are exploring safety improvements that can be made to this critical route, connecting interstate 5 and the proposed High Desert Multi-Modal Transportation Corridor.

Because of this commitment from Centennial to improve transportation for North LA County we can firmly stand in support of this new project. I urge the Regional Planning Commission to recommend approval to the Board of Supervisors for the Centennial at Tejon Ranch project.

Thank you for your consideration of my comments.

ADD-F.18-1 (cont.)

Sincerely,

Victor Lindenheim
Executive Director

C: J. Sackett

Response to Comment Letter ADD-F.18
Golden State Gateway Coalition
August 21, 2018

Response to Comment ADD-F.18-1:

Thank you for your participation in this public process. The Commenters' support for the Project is noted, was provided to the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. This comment does not specifically address the adequacy of the EIR, and no further response is required.

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Association of Rural Town Councils
C/O Three Points-Liebre Mountain Town Council
P.O. Box 76
Lake Hughes, CA 93532
ourartc@gmail.com

23 August 2018

SENT VIA EMAIL

Regional Planning Commissioners
Mr. Jodie Sackett
Los Angeles County
Department of Regional Planning
Hall of Records, 13th Floor, Room 1348
320 West Temple Street
Los Angeles, CA 90012
jsackett@planning.lacounty.gov
213.974.6443

Dear Commissioners and Mr. Sackett,

RE: Project No. 02-232, Centennial Specific Plan Final Environmental Impact Review

The Association of Rural Town Councils (ARTC) is comprised of member councils in unincorporated Northern Los Angeles County, originally formed to serve as a forum for rural residents and councils to participate in state, regional, county, and local issues, as well as an exchange for information regarding their governance. Each of our communities enjoy diverse surroundings unique to rural areas of the Antelope Valley. Concerning the Centennial Project (Project) we have apprehension and concern for the impacts to our rural town areas, and impacts to the natural areas slated for development as a result of this Project, and additional cumulative effects from major planned infrastructure projects like the Northwest Highway 138 and California High speed Rail, as well as thousands of acres of utility-scale renewable energy project proliferation. ADD-F.19-1

There is great privilege in large landowner property rights, and their gain is paid by the tremendous cost to small community rural residents. There is no doubt that a faceless, large corporate interest has wielded political, social, and economic influence in its efforts to bring this Project forward. Furthermore, in its final form, the "new city" will wield its political, social, and economic influences over claimed resources, as well as surrounding rural communities, who will bear the "significant but unavoidable impacts" from growth-inducing development, infrastructure that encourages growth, and at the same time, new use and/or degradation of water resources, increased traffic, increased fire hazards, and injury or destruction of environmental resources. ADD-F.19-2

Limited liability companies who build the "villages" and industrial park, will walk away once sold without any repercussion for impacts to their own community development, neighboring communities, or residents and workers, via earthquake, fire, flooding, air pollution, water pollution, or public health issues. The Project's Economic Opportunity Areas are excluded from policy requirements and ultimately skirt liability--by allowed increased density and intensity of development within "Special Management Areas," and responsibility for loss due to disaster imposes costs on taxpayers across the County. Moreover, the AVAP indicates "the planning area is predominately rural and has major constraints, including natural hazards, environmental issues, lack of ADD-F.19-3

infrastructure, and limited water supply. It is critical that existing rural communities, agriculture, natural resources and biological diversity remain protected" (General Plan, Ch. 5, Planning Areas Framework, Antelope Valley Planning Area, P. 33).

ADD-F.19-3 (cont'd)

The Tejon Ranch Corporation achieved its land use zoning desires in the Antelope Valley Area Plan (AVAP), converting rural land use and large parcel minimums to high density residential, suburban residential, and high intensity commercial and industrial uses that exclude adherence to policy requirements for hazards management and biological resource considerations. Land Use goals and policies listed below identify the exclusions, which show inherent conflict between designated economic opportunity areas (EOA) development and policies meant to protect residents from hazards:

> Goal LU 3: A land use pattern that minimizes threats from hazards.
>
> · Policy LU 3.1: *Except within economic opportunity areas, prohibit new development on fault traces and limit the amount of development in Seismic Zones*, through appropriate land use designations with *very low residential densities*, as indicated in the Land Use Policy Map (Map 2.1) of this Area Plan.
>
> · Policy LU 3.2: *Except within economic opportunity areas, limit the amount of potential development in Very High Fire Hazard Severity Zones,* through appropriate land use designations with very low residential densities, as indicated in the Land Use Policy Map (Map 2.1) of this Area Plan.
>
> · Policy LU 3.3: *Except within economic opportunity areas, limit the amount of potential development in Flood Zones designated by the Federal Emergency Management Agency, through appropriate land use designations with very low residential densities*, as indicated in the Land Use Policy Map (Map 2.1) of this Area Plan.
>
> · Policy LU 3.4: *Except within economic opportunity areas, limit the amount of potential development on steep slopes identified as Hillside Management Areas, through appropriate land use designations with very low residential densities,* as indicated in the Land Use Policy Map (Map 2.1) of this Area Plan.
>
> · Policy LU 3.5: *Except within economic opportunity areas, limit the amount of potential development in landslide and liquefaction areas, through appropriate land use designations with very low residential densities*, as indicated in the Land Use Policy Map (Map 2.1) of this Area Plan.
>
> · Policy LU 3.6: *Except within economic opportunity areas, limit the amount of potential residential development in airport influence areas and near military lands, through appropriate land use designations with very low residential densities*, as indicated in the Land Use Policy Map (Map 2.1) of this Area Plan. (This should include military airspace, a crucial and large economic force in the Antelope Valley and for national security.)

ADD-F.19-4

Furthermore, the AVAP explains "local governments needed to balance increased growth with obligations to protect existing natural resources. These new obligations, combined with a better understanding of the importance of balancing rural and urban areas in Los Angeles County, have created a new model for regional development. This new model, which directs new investment to areas with existing and/or planned services and facilities *and away from areas with natural hazards and environmental resources*, will shape land use in the Valley, with policies that emphasize resource efficiency, economic growth, and the preservation of rural

ADD-F.19-5

character" (AVAP LU-2 June 2015). During the AVAP update process, infill was promoted, which would direct future development to areas of existing infrastructure and services, presumably in response to AB 857, which outlines "smart growth" objectives: "to promote infill development by rehabilitating, maintaining and improving existing infrastructure *presently* served by transit, streets, water, sewer, and other essential services; to *protect environmental and agricultural resources*; and to encourage development patterns by ensuring that any infrastructure associated with development that is not infill, is built *adjacent* to existing developed areas." However, in the last days of the AVAP planning process, influenced by Project proponents, policies and goals diverged from this State-mandated strategy.

ADD-F.19-5 (cont'd)

TRAFFIC

What we term the Lakes and Valleys Communities—town councils comprising the areas of Leona Valley, Green Valley, Elizabeth Lake and Lake Hughes, and Three Points; in addition to the community of Antelope Acres to the northeast, will feel direct impacts from the Project and other large infrastructure projects meant to support this massive development.

The "remote" (AVAP) rural community of Three Points, directly adjacent to the proposed Project, has two possible access points from the Northwest Highway 138, and join five other routes that connect to Lancaster/Palmdale and Santa Clarita Area. We are concerned that traffic movement from Old Ridge Route Road to Pine Canyon Road, and also Three Points Road to Pine Canyon Road, both direct routes to and through our community, will cause undue traffic impacts as the Project is built. According to the FEIR, no impacts are identified. However, Alternative 2 of the NW Highway 138 Improvement Project locates a roundabout/ramp at Three Points Road, even after their town council requested that no roundabout/ramp be placed at Three Points Road. At the same time, the AVAP shows no intersection identification at Three Points Road, and this reflects policies meant to protect rural communities.

ADD-F.19-6

As it pertains to the Lakes and Valleys Communities, and evidenced by other suburban, commercial, industrial, and specific plan development in Lancaster/Palmdale and Santa Clarita, large volumes of commuter traffic use Elizabeth Lake Road from Palmdale to Bouquet Canyon Road to Santa Clarita., and San Francisquito Canyon Road (ending at Copper Hill Road in Santa Clarita); Lancaster commuters traveling to Santa Clarita use West Avenue K to Johnson Hill Road, to Elizabeth Lake Road to San Francisquito Canyon Road (or Bouquet Canyon Road) to Santa Clarita, as well. These routes are used both directions to avoid traffic on State Route 14 because of congestion, dangerous driving conditions, weather impacts, and road closures. The traffic and noise impacts to the rural communities of Leona Valley, Green Valley, Elizabeth Lake, Lake Hughes, and Three Points along the previously identified routes will increase considerably, and are not discussed in the DEIR or The FEIR, which assumes virtually all traffic will use NW Highway 138 to reach Interstate 5 or State Route 14.

ADD-F.19-7

The ARTC believes it is reasonable to expect similar and increased Highway 138 traffic impacts created by the Project that bring drivers to our roads now. Interstate 5 closures divert cars to Highway 138 via Pine Canyon Road from Lake Hughes Road (Castaic) to Three Points Road, San Francisquito Canyon Road, and Bouquet Canyon Road. Old Ridge Route Road to Three Points Road to Pine Canyon Road to Elizabeth Lake Road to Munz Ranch Road, Johnson Hill Road, or the other canyon routes provide a bypass for commuters and travelers avoiding traffic on NW Highway 138 moving to and from SR 14, with commuters looking for more direct routes to areas of Santa Clarita, as well as commuters seeking to avoid an already congested I-5, with *its own* dangerous driving conditions, semi-truck traffic, weather impacts, and road closures.

ADD-F.19-8

Antelope Acres Town Council area will also face tremendous impacts from the Project and its associated infrastructure requirements of widening NW Hwy 138 to State Route 14. The highway expansion will further divide the community and will add an off-ramp at the intersection of 90th Street West--the community's main thoroughfare, increasing traffic and changing the complexion of their rural community; along with the Central EOA and its high density, high intensity development potential, will attract even more growth, traffic, and

ADD-F.19-9

congestion. The AVAP DEIR has not identified 90th Street West in the (AVAP) Project Area Roadway Network Table 5.16-1, and the Congestion Management Plan offers no 90th Street West/NW Hwy 138 evaluation (5.16-11). Moreover, the NW Hwy 138 FEIR states the improvements will, "change the community character with the widening of the roadway and other highway safety features" (NW Hwy 138 FEIR Figure 25 Proposed Treatments Alternative, 134/518).

ADD-F.19-9 (cont'd)

The FEIR states that Caltrans' Northwest Highway 138 (NW Hwy 138) Improvement Project will determine its own schedule for implementing planned improvements. However, FEIR documents state the current highway conditions will accommodate only 10 percent of the project build. To accommodate beyond 10 percent, and up to seventy-five percent of the project, will require Caltrans to complete the NW Hwy 138 Improvement Project, and the final portion will require a six lane expressway from 300th Street West to approximately 240th Street, involving the portion of Three Points-Liebre Mountain Town Council area along Highway 138, including the intersection of Three Points Road/ Hwy 138. This configuration of additional lanes to accommodate one hundred percent of the project was not evaluated in the Environmental Review of the AVAP or the NW Highway 138 Improvement Project EIR for its impacts to Lakes and Valleys and Western Antelope Valley communities. The AVAP Transportation and Traffic section of the EIR, Chapter 5.16, neither lists Three Points Road in table 5.16-1, Project Area Roadway Network, nor provides evaluation in the Congestion Management Plan (CMP), while listing sections of NW Highway 138 considered part of the CMP freeway network, and stating sections were selected based on locations that could be impacted by the Proposed Project (AVAP DEIR, 5.16).

ADD-F.19-10

It is understood the AVAP EIR could not evaluate impacts from all future projects, but the Centennial land use and zoning was mapped into the AVAP, and the plan language indicates the project is associated with and relies upon the NW Highway 138 Improvement Project for traffic management. In order to comply with CEQA, Regional Planning, as the lead agency, must be responsible for requiring conditions and mitigation to reduce traffic impacts to the Three Points-Liebre Mountain Town Council Area, as well as the rural communities of Leona Valley, Green Valley, Elizabeth Lake, Lake Hughes, and Antelope Acres. As such, the ARTC requests that indirect access to NW Highway 138 be made via a frontage road from 240th Street West to Three Points Road, indirect access to 240th/245th St. West/Lancaster Road; and indirect access provided to Old Ridge Route Road. The NW Hwy 138 FEIR, which contains language that will allow for this request, states, "Between Gorman Post Road and SR-14, all existing intersections with major roadways would be modified to restrict access to higher traffic roadways in order to improve safety and operations of the facility," and "The decision on the actual intersection treatment will be determined during the final design phase" (State Route 138 Corridor Improvement Project, S.3.3, Build Alternative 2).

ADD-F.19-11

Finally, Caltrans' own NW Highway 138 Natural Environment Study (NES) states, ***"The widening of SR-138 is expected to create growth inducement that will increase human disturbance associated with all-terrain or off-highway vehicle use, littering,vagrancy, pollution, introduction of pet species. New residential and commercial construction in the area is also expected to occur which will contribute to the edge effect of adjacent habitat. These new residential and commercial development projects include Centennial Ranch, Newhall Ranch, Tejon Industrial Complex, Southern California Logistics Airport, Palmdale Airport and Sunshine Landfill"*** (NES, March 2016, Ch.4.4.6, 116). This is counter to statements in the FEIR that contend the project is "growth accommodating" rather than "growth inducing," and that the NW Hwy 138 will be improved without the Project development. It is reasonably certain Caltrans would not invest in improvements in the near term, or even several years from now, if traffic created by the Project did not exist and Level of Service remained adequate. The question remains, will we be able to have both preserved rural community environments in our Lakes and Valleys and Western Antelope Valley communities *and* accessibility provided by an improved NW SR 138, more than 19,000 homes and 10 million square feet of commercial/ industrial space?

ADD-F.19-12

FIRE

The words "fire" associated with "urban-wildland interface" are horrifying to rural residents, especially those of us who have experienced wildfire destruction. Some of the worst fires in California, during the last two years occurred at the urban-wildland interface, where there is increased human presence which is identified as a major cause of fire. Even the Angeles Forest Land Management Plan admits that 90% of fires are human caused. Increased building allowed by planning departments, increased population, and forest use will place nearby rural communities at risk, including the Project area; and even accounting for the firefighting agreement between Los Angeles County and the US Forest Service for reimbursable and non-reimbursable cost, and the location of Fire Services within the Project, we have seen that in less densely populated areas contiguous to forest boundaries in which the Forest Service assumed incident command, large areas of the forest burned, and rural residents left to face consequences. This affects watershed capability, introduction of invasive weed species, and represents a huge cost for not only local residents, but County residents who benefit from natural resources and cultural and social benefits of experiencing natural areas. The AVAP addresses High Fire Hazard Severity Zones by implementing low density land use development in "Special Management Areas" that are excluded from the Economic Opportunity Areas of the Centennial Project. In addition, the project area is in a frequent high wind event area, making fighting fires especially difficult, and directly contributes to spread of fire to adjacent areas. Low density housing would reduce impacts to the currently rural area and surrounding natural areas. Planners overlooked the hazards and monetary costs to taxpayers' increased burden associated with high density residential, commercial, and industrial development in the EOAs, like Centennial, which seek to build and populate the "urban-wildland interface."

ADD-F.19-13

BIOLOGY

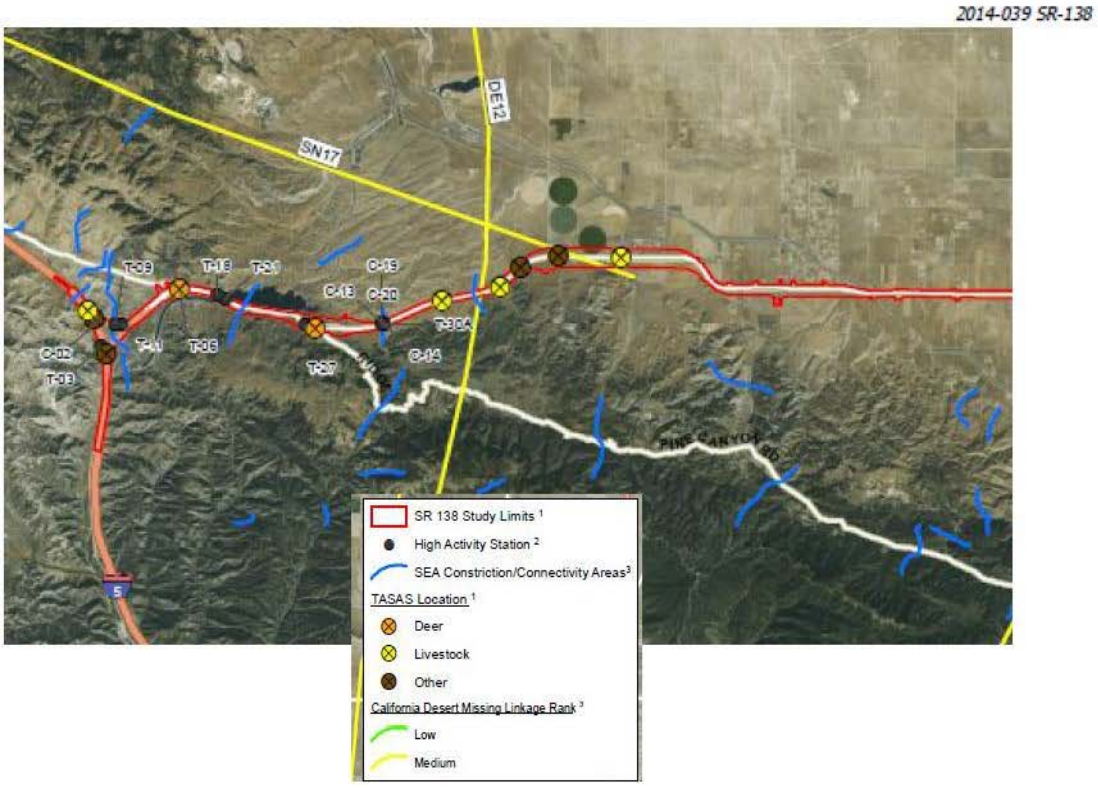
Our reading of the Biological Resources Section 5.7 found a continuous downplay of wildlife crossing the project area identified as a convergence of the Transverse, Tehachapi, and San Gabriel mountain ranges, and a highly valuable biologically rich area. Surveys of wildlife movement were performed and persist in the assumption the I-5, Highway 138, and the Aqueduct are substantial barriers in place already. Personal accounts of roadkill and live animals in the vicinity of the project and near the intersection of the NW Highway 138 and Interstate 5 indicate large and medium sized mammals do attempt to cross the area: Mountain lion, black bear, feral pig, bobcat, badger, fox, and deer. We logically see development along the drainages in the Project area as eliminating movement possibilities for species sensitive to human presence and urban development activities. Combined with strictures at the highways (without crossing structures) and impediments described along the California Aqueduct, it would be crucial to provide crossing structures as well as protected broad swaths of landscape for movement and cover, which Project documents indicate would *not* be provided. Is it possible development will drive wildlife movement to the west toward the "formidable obstacle"of the I-5/138, Gorman Post Road connection, as well as both north and south, across Highway 138—a proposed six lane freeway, toward the industrial development area bordering the SEA 17 oak and pine forest? The Project DEIR Section 5.7 explains barriers to movement—even though "natural landscape features of the region such as the Tehachapi Mountains, ***form a natural linkage or corridor on a regional scale***. Many of these features are further constrained by anthropogenic barriers such as I-5 and the California Aqueduct resulting in small wildlife crossing where passage for some species is ***one of a small number*** of remaining linkages in the region"--all the more reason to create safe crossings. Furthermore, local wildlife movement on the Project site is speculatively described: "the Aqueduct *probably* effectively serves to block east-west movement on the Project site for most ground-dwelling wildlife. . . limited opportunities for wildlife to cross the Aqueduct have been identified at four locations, but wildlife movement across that formidable barrier is *probably* a rare event" (5.7-54). How can the DEIR Biological Resources Section claim with certainty limited wildlife crossing linkages, and also use "probably" to describe the freeway, highway, and Aqueduct as "formidable barriers." This causes one to question if there were wildlife corridor/movement studies.

ADD-F.19-14

Caltrans' "Wildlife Corridor Study: Revised Final Report for the State Route 138 Northwest Corridor Improvement Project, Interstate 5 to State Route 14, Los Angeles County, California, 2016" shows crossing studies in the Project Area, and part of the Study's Figure 13 (59/65) captures priority areas for wildlife movement--recorded high activity, SEA constriction/connectivity areas, and California Desert Missing Linkages rank, from the areas directly west and east of Quail Lake, comprising the Project area. The tracking stations placed throughout the study area (Hwy 138/I-5 to SR 14) "documented the movements of seven target mammal species: coyote, black-tailed jackrabbit, bobcat, desert kit fox, mule deer, raccoon, and mountain lion throughout the study" (5.2 Results of the Study 54/65). The western portion of the study area contained bobcat, gray fox, mountain lion, and pronghorn antelope observations from I-5 to 300th Street West, essentially spanning the Centennial Project area (5.2.4, Incidental Observations 56/65). High use areas are located at stations T-11, T-18, T-21, C13, C-20, and C-14. Station T-03, while not a high activity study location, was recorded as such due to documented observance of a mountain lion traveling through the drainage there (inserted photograph of lion roadkill, below, was taken near this area); and mountain lion tracks traveling northward were observed near the entrance of the High Desert Hunt Club, part of the Centennial "conservation open-space," near C-24 and T-37 (5.3 Wildlife Movement Analysis 55/65). The Report further states, "Due to the large amount of open space required for mountain lion survival (mating, foraging, and cover), [these] location[s] may be an [sic] important area[s] for mountain lion travel within the Project corridor. Along the same lines, one set of mountain lion tracks traveling north were incidentally observed near the entrance to the High Desert Hunt Club (near stations C-24 and T-37). This area should also be considered a high use area for the same reasons that T-03 is considered a high use area." (5.3 Wildlife Movement Analysis 55/65). We question, then, the Project studies performed at culverts along the I-5, between Gorman and the Grapevine, and the assertion that those structures would provide adequate crossing opportunities for wildlife in the area.

ADD-F.19-15

Figure 13. Highest Priority Areas within the Project Corridor for Wildlife Movement



We can easily assert the presence of mountain lions and their movement on the Tejon Ranch, the area of SEA 17 directly adjacent to the project, in addition to well documented presence of healthy lion populations on Portal Ridge Wildlife Conservation Area in the vicinity of the community of Three Points, that verifies the range of this large mammal's movements, since they are known to require from 10 to 370 square miles of territory. We know lions cross the Highway 138 because we have seen roadkill—documented in the photograph below, struck at the transition to the I-5.

HIGH DESERT HUNT CLUB ENTRANCE, HWY 138
LION TRACKS OBSERVED MOVING NORTHBOUND

We believe this justifies necessity of Project design features that provide several safe crossing areas at the I-5 and Highway 138 as well as movement features for the eastern portion of the Project, for not only large, but medium and small mammals. This is supported by SEATAC comments (07/07/2008) and discussion which suggests study of wildlife corridors for Centennial: "Wildlife corridors exist in nature and are naturally-occurring functions of the land developed over hundreds to thousands of years. Centennial project studies should have been conducted to locate existing corridors for large and small wildlife and plan the project around them, not suggest new directions for wildlife to travel after build out. One cannot, for convenience, move the wildlife corridors to peripheral areas around the project. There is probably some movement of wildlife in an N-S direction across the grasslands between the Tehachapis and Liebre Mountain. Corridors may be a network rather than singlestrand, linear. The biological reports need to present studies that investigate the current, natural, unimpeded wildlife movement across the project site, between the mountain ranges. The report should provide a map clearly indicating where the movement now occurs." If it is the intent of the Tejon Ranch to support conservation, preservation and improved conditions for wildlife displaced or forced to avoid the Project in foraging, breeding, and dispersal movements, it is imperative the Project be required to mitigate wildlife crossing issues, not merely propose consideration for one area, as stated in PDF 7-7, "the Project Applicant will *explore* locating a wildlife-friendly crossing across the Aqueduct with the California Department of Water Resources" (5.7-139). We add that the previously cited Caltrans study was by no means complete, since biologists did not perform spring and summer wildlife dispersal studies due to contract limitations, but believe it provides other information valuable to our argument for crossing structures.

ADD-F.19-16

The State of California Fish and Wildlife (CDFW) DEIR Letter requests testing of wildlife and water sources for rodenticides. The Mitigation and Monitoring Program indicates: "All rodenticides containing anticoagulants shall be prohibited from use on the Project site or Mitigation Preserve lands. The probation shall be clearly described and distributed to home buyers through their home purchase contract and CC&Rs (MMRP, C-12). However, there is no real enforcement capability to determine whether rodenticides are being used, or how any

ADD-F.19-17

additional efforts will prevent their use. The only way to evaluate the success of the prohibition is to test surface water and animals themselves. Research reveals the extent of anti-coagulant poisoning in wildlife:

> California's mountain lions are still being exposed to deadly second-generation rat poisons despite a 2014 ban on those rodenticides being sold over the counter. That's the upshot of a California Department of Fish and Wildlife database of mountain lion mortalities that tallies the results of liver tissue samples from 68 dead lions delivered to CDFW between November 2015 and December 2016. The CDFW tested liver samples from the lions for the presence of seven different anticoagulant rat poisons. Of the 68 on the list, only five showed no evidence of exposure to any of the seven rodenticides tested for. Of the remaining 63 pumas, all but four had detectable amounts of more than one rodenticide in their livers, with 43 showing at least traces of three or more anticoagulants. One unlucky big cat, which died in March 2016 in Orange County, had significant amounts of six different rodenticides.
>
> ("Despite Ban, Rat Poisons Still Sickening Mountain Lions," Chris Clarke, KCET, https://www.kcet.org/redefine/despite-ban-rat-poisons-still-sickening-mountain-lions)

ADD-F.19-17 (cont'd)

The Defenders of Wildlife also provides additional education regarding poisoning of wildlife, posting information that a California Department of Fish and Wildlife study found that of the nearly 500 wild animals tested between 1995 and 2011, 70 percent had anticoagulants in their system. Species included bobcats, eagles, foxes, hawks, mountain lions and owls and found the rodenticide [d-Con] was implicated in the deaths of 25 different wild animal species, including hawks, mountain lions, endangered San Joaquin kit foxes and northern spotted owls, as well as numerous cats and dogs" (https://defenders.org/magazine/fall-2014/d-con-be-gone). Is it prudent to ask about levels in humans who do not take medically prescribed anti-coagulants? As mentioned, the DEIR mitigation details offering pamphlets to homeowners forbidding the use of such poisons, but no effective way for monitoring the success of the action. The answer is as the the CDFW recommends--animal and water testing. This must be required.

ADD-F.19-18

The ARTC has deep reservations regarding the stewardship on conservation lands and open-space allocated on the Project site. All of the organizations and biologists associated with the formation of the Tejon Ranch Conservancy (TRC) have been required to sign non-disclosure agreements, and are forbidden to talk about the Centennial Project in any way, and cannot comment on *any* Tejon Ranch project. Make available all biological reviews, surveys, and documents associated with wildlife studies to members of the public. Additionally, recent "blacklisting" of certain members of the California Native Plant Society occurred, who were told their access permission to TRC lands had been rescinded without explanation, and after commenting on the Project DEIR. The Tejon Ranch asserts its authority to determine who will gain access, and it is understandable to limit activities in order to preserve the integrity of conservancy lands. "The Conservancy will oversee managed public access to conserved lands and will provide interpretive and environmental education programs for local communities" (DEIR, 5.7-16) However, the Conservancy has received State of California monies in the amount of 15 million dollars for purchase of conservation land. How is it they can restrict members of their local community and members of the public who helped pay for this acquisition if they properly apply for access and pose no threat to the conservation lands? The TRC should reveal the requirements for public access and amend them to provide fair and equal treatment for access, and non-discrimination based on rights to free speech.

ADD-F.19-19

The non-disclosure requirements of working with the Tejon Ranch extends to employees as well, even when it involves the ranch breaking the law. In 2012, it was reported "The Tejon Ranch has agreed to pay $136,500 in fines and restitution for illegally killing at least 11 mountain lions to prevent them from competing for game with high-paying trophy hunters, the Kern County district attorney's office announced Friday. The settlement capped a 10-month investigation by the California Department of Fish and Game into claims made by a former Tejon Ranch Corp. hunting guide who said he was fired after he complained about the illegal killing of the wild

ADD-F.19-20

predators" (Los Angeles Times, "Tejon Ranch to pay fine for killing mountain lions," February 11, 2012, Louis Sahagun). It was reported as many as 20 lions were killed. "As a result of their investigation, state wildlife authorities determined that mountain lions were, in fact, unlawfully killed by Tejon ranch employees."

ADD-F.19-20 (cont'd)

The Project DEIR Biological Review tells us that urban development will impact the open-space conservation areas and wildlife movement corridors (5.7-168 Centennial Project Draft EIR):

> *Urban development also tends to attract wildlife species that are better adapted to urban s*ettings; these include house sparrows (*Passer domesticus*), European starlings (*Sturnus vulgaris*), rock pigeons (*Columba livia*), brown-headed cowbirds, American crows (*Corvus brachyrhynchos*), ravens (*Corvus corax*), striped skunks, Virginia opossum (*Didelphis virginiana*), red foxes (*Vulpes vulpes*), raccoons, and Norway rats (*Rattus norvegicus*). **Most native species are less adapted to urban development; their populations tend to decrease or be eliminated entirely in the vicinity of residential or recreational developments.** In addition, local increases in meso-predators (e.g., skunk, opossum, fox) can adversely impact native rodent and bird populations. Developed areas also attract non-native Argentine ants, which respond to high soil moisture in horticultural circumstances. These ants have the potential to impact native ant populations, which serve as pollinators and seed dispersers for many native plant species. Additionally, the reduction of native ant populations due to the introduction of Argentine ants could adversely affect various wildlife species such as the coast horned lizard (a species of special concern), which depends on native ants as a food source and which does not eat the exotic Argentine ants. **Such impacts may result in reduced viability of wildlife movement corridors in adjacent open space areas.**

ADD-F.19-21

These statements give the reader the impression the Project has identified impacts that will have significant permanent pervasive impacts. It is essential that more effort be made to reduce impacts by providing for "buffer zones," than might function to reduce edge effects, and that do not count as mitigation land, and by improving and maintaining habitat affected by urban development proposed by the project, and to eliminate activities allowed by the Ranch-Wide Agreement. These include: hunting, mining, oil and gas development, and water extraction.

It is usual for conservation mitigation to be awarded to independent conservancies, to be held and managed in perpetuity; however, it appears a conflict of interest for the Tejon Ranch Corporation to control to such an extent all the preserved lands on the ranch, including those of the Centennial Project. The conservation lands offered for the eastern portion of the Project actually contain the High Desert Hunt Club. The Ranch-Wide Agreement allows "harvesting" of wildlife as a form of conservation management and income; it it operates a business offering trophy and upland game hunting. Moreover, the agreement that guides the Ranch, its Conservancy, and business operations allows activities on preserved lands that veer from the idea of providing 'safe haven' to wildlife displaced by the massive Project area and intensity of its proposed development:

ADD-F.19-22

> Wildlife Management. Grantor retains the right to use, and to permit other parties to use, the Easement Property for activities intended to manage wildlife on the Easement Property, including, but not limited to, creating, operating and maintaining commercial and non-commercial hunting programs (including raising, lodging, introduction and dispersal of native species and pheasant (and other non-native species, subject to Grantee's prior written approval, which shall not be unreasonably withheld) for purposes of hunting on the Conserved Lands), non-consumptive wildlife viewing (Exhibit N - Page 19 Tejon Ranch Conservation and Land Use Agreement 181/267).

> Weed, Non-Native Plant Control. Grantee may use pesticides, herbicides or other biocides, mechanical removal or other reasonable methods to control noxious weeds and to eliminate non-native plant species from the Easement Property, except that Grantor's prior written consent (which may be granted or withheld in Grantor's sole discretion) shall be required for any such activities in the Designated Farm Areas, Designated Mining Areas, Designated Oil and Gas Areas and Designated Water Bank Area, or for any controlled burning. In addition, Grantee shall coordinate all such activities with, and shall not unreasonably interfere with, Grantor's grazing and fuel management activities (Exhibit N - Page 25 Tejon Ranch Conservation and Land Use Agreement).

So, "management" of wildlife via "harvesting" will be permitted on conservation lands, which we assume includes the open-space set aside for the Project--the High Desert Hunt Club (counted as open-space allocation and conservation land), and the rest of the Ranch not occupied by its development projects. Chemical removal of non-native plant species is allowed, and it is easy to question the effects this has on special-status plants, grasslands, grazing lands, and wildlife that resides in and moves through conservation areas. The Tejon Ranch and its Conservancy, through the agreement, will maintain hunting operations, its mining areas, oil and gas activities, and grazing and fuel modification activities. County land use designation (Title 22, Part 9) O-S allows for a variety of uses—including parking lots, golf courses, crops, oil and gas drilling, etc. The open-space lands set aside for Centennial must not be used for any of the above activities, and it has been suggested in past correspondence that an independent conservation organization steward the open-space conservation land for the Project that will protect wildlife seeking refuge from hunters, and from the effects of the Project's other activities and urban development.

ADD-F.19-22 (cont'd)

Alternative A-No Project, is most advantageous here. However, if there is a preferable alternative that provides additional preserved acreage, it is identified as Alternative E (DEIR, 8.0, 8-18, Alternatives to Proposed Project, 1819/2003). It describes more density and intense development east of the Aqueduct, adding more than six hundred acres to Conservation-OS, with no development or added infrastructure west of the Aqueduct, protecting oak woodlands and savanna. "Hunting, fire management, and grazing impact oak woodlands on the ranch. Depending on the intensity, duration and seasonality of grazing, livestock can influence seedling recruitment, both directly by way of browsing and indirectly by reducing the competition from annual grasses. Grazing can also alter soil properties including bulk density and infiltration rates. Fire influences oak woodlands by altering fuel loads, understory assemblage and composition, and soil properties. Hunting impacts oak woodlands by affecting deer, elk, and feral pig populations, and the understory community" (Ecology and Management of Oak Woodlands on Tejon Ranch, 2011, UC Santa Barbara). For the improvement of the conservation area provided by Alternative E, exclusion of grazing is crucial and recommended, but controlled and maintained by the Ranchwide Agreement. Mitigation must include cessation of grazing and restoration activities to improve the conservation area.

ADD-F.19-23

<u>WATER</u>

We have other concerns regarding the adequacy of water, since wells will serve over 5,000 residents before any other water is used, even though the Project has acquired rights for water to be delivered via the Aqueduct. Antelope Valley-East Kern Water Agency, during times of drought, has limited allocations to five percent of normal, which has driven major water purveyors in the Antelope Valley to pump additional water to make up for the loss. What if AVEK water and banking are not enough? If rather common and perhaps greater drought conditions persist, will pumping draw down water levels in the Western AV and affect rural residents with private wells? Prove a five year supply is enough to protect the water of current residents in the area. Guarantee this Project will not cause a serious drop in water levels and deplete watershed resources over time.

ADD-F.19-24

Will groundwater pumping affect seeps, springs, and riparian habitat that exist on the Project property and conservation areas? There must be limits to preserve wells and riparian areas, and independent monitoring/mitigation to assure against their loss.

ADD-F.19-24 (cont'd)

AIR QUALITY

The ARTC has been concerned for some time over air quality in the Antelope Valley, and has recently undertaken a grant proposal for California Air Resources Board's Community Air Protection Program (AB 617) to evaluate, quantify, and define mitigation measures for unclassified particulates in our air. Antelope Valley residents have the highest death rates in the County for pulmonary and respiratory diseases caused or exacerbated by PM 2.5 and PM 10. Childhood asthma rates are the highest in the County. Antelope Valley residents are also nine times more likely to contract the fungal disease Valley Fever (caused by *Coccidioides immitus* carried on fugitive dust) than anywhere else in the County. The Project will contribute greatly to fugitive dust issues during construction phases over *twenty years or more*! Dust Control Best Management Practices, to date, have been ineffective in controlling fugitive dust from development projects during frequent drought conditions and high-wind events.

This Project will establish a commuter community with associated automobile emissions during its first phases without industrial park development that supposedly keeps people from commuting to jobs elsewhere. (The validity and lack of success regarding such a claim—Smart Growth—can be observed in Santa Clarita area's specific or master planned communities and traffic congestion created as a result) Conversely, industrial development will bring emissions from businesses and diesel truck traffic combined with current cement mining operations—blasting, earth moving, diesel equipment, trucks, and fuel-burning kilns. Prevailing westerly winds will carry pollutants to rural communities to the east and southeast across the Antelope Valley. We see a future of increased air pollution and resulting public health issues made worse by this Project, and without meaningful management practices and actual mitigation.

ADD-F.19-25

SUMMARY

Our requests include assurance of public access, participation, and representation at the Tejon Ranch Conservancy Meetings; require changes to eliminate exclusion to conservancy properties, require full disclosure and transparency of conservation board actions and biological studies on conservancy lands, including those set aside for the Centennial Project. Independent management of lands and transparent actions would go a long way toward improving public perception. Open-Space zoning designation includes a variety of uses; use of O-S conservation land should consist of preservation, conservation, and habitat improvement and no other uses to assure least amount of impact, since O-S will adjoin the city of Centennial and will be subject to deleterious effects associated with incompatible use. The Tejon Ranch-wide Agreement also allows uses that are counter to preservation of natural areas and wildlife through Tejon Ranch Corporation and hobbled Conservancy Board control of all resources on conservancy lands. Lands are subject to private corporate "management" that includes trophy hunting, mining, oil extraction, and groundwater extraction, that will affect wildlife seeking refuge from development. Reticence to improve wildlife movement and connectivity through additional provisions for safe passage across highways, roads, and water barriers gives us pause to question Project commitment to conservation. If an alternative must be chosen, preference is Alternative E, for its additional preservation of land west of the Aquaduct.

Pumping of groundwater will affect all public and private wells in the area, surface water, riparian habitats, drainages, ephemeral streams, vernal pools, seeps and springs crucial to current rural residents and future health of natural areas meant to support wildlife. Air quality impacts of the Project's twenty year construction build-out, and early phase creation of a commuter community will never be reversed, is not "Smart Growth," and will add public health burden to rural communities nearby and downwind. Air quality is associated with climate change, as is urban heat island effect. Heating of our already hot and dry high desert area can create local climate change, and affect the amount of rainfall that reaches our mountain watershed areas, and is anticipated to

ADD-F.19-26

cause movement of wildlife upslope. Locally harsh, intemperate weather conditions like high-wind events, heat, extreme cold, and snowfall will crimp actual use of the Project's highly-touted walkable areas and bicycle paths. This is seen in other urbanized areas of the Antelope Valley that provide sidewalks and bicycle lanes. Combined with lack of public transportation, this encourages automobile use. Effects of increased traffic throughout adjacent rural communities requires mitigation for additional freeway lanes that neither Planning nor Caltrans has reviewed in their EIR documents.

ADD-F.19-26 (cont'd)

Finally, it is not enough to provide mitigation; desirable outcomes must be evaluated, ensured, and enforceable, and the Project accountable. It was suggested by SEATAC, when the Centennial Project included SEAs, "To insure preservation of the biological resources of the open space there needs to be a detailed management plan. Although it is typical to have such a plan approved by County without public input after the EIR has been approved, in this case the impact is so substantial that SEATAC thinks the detailed plan should be part of the EIR and subject to SEATAC review as well as to public comment. The permit on the EIR once granted, cannot be revoked, neither legally, nor in the de facto sense" (SEATAC Meeting Minutes, 9/8/2008, 13/47). This would also be valuable to the numerous other significant impact categories discussed above that cannot be adequately mitigated to less than significant, but need ongoing review to assure desired outcomes are achieved, and if they are not, remedial action and responsibility required for the time long after permits are issued.

ADD-F.19-27

Sincerely,

Susan Zahuta

Director

Response to Comment Letter ADD-F.19
Association of Rural Town Councils
August 23, 2018

Response to Comment ADD-F.19-1:

Thank you for your participation in this public process. These comments have been provided to the Regional Planning Commission and will be provided to the Board of Supervisors for Consideration. This introductory comment does not address the adequacy of the EIR, and no further responses is required. With regard to the areas of concern listed in this comment, please see more detailed responses below.

Response to Comment ADD-F.19-2:

With regard to the assertion that surrounding communities will bear the burden of the Project's impacts, or will subsidize the Project, the Commenter's opinion is noted, but the County disagrees. As discussed in the Draft EIR, such as in Section 5.16, Fire and Law Enforcement, and Section 5.17, Other Public Services, the Project is responsible for providing infrastructure and services and would not create negative fiscal impacts on surrounding communities. The Project will provide significant net economic benefits to Los Angeles County, including expected annual revenues of $43,394,902.00, versus $21,827,596.00 of annual costs to the County's General Fund for re-occurring public services, representing an annual net benefit to the General Fund of about $21,567,306.00. The Project will also generate an estimated $22,328,502.00 of property tax revenues. Further, the Project will provide schools and other necessary services, a variety of retail and other commercial uses, and employment centers to the community. The Project includes a network of sidewalks, greenway trails, and community trails to link its residential, schools, shopping, and employment centers. (Draft EIR, page 4-34) With regard to Project-related impacts in areas mentioned by the Commenter, please see Draft EIR Sections 6.0 (growth-inducing impacts), 5.18 (water resources), 5.10 (traffic), 5.3 and 5.16 (fire hazards and services). This comment does not specifically address the adequacy of the EIR, and no further response is required.

Response to Comment ADD-F.19-3:

With regard to the assertion that surrounding communities will bear the burden of the Project's impacts, please see response to Comment ADD-F.19-2. With regard to the assertion that the Antelope Valley Area Plan (AVAP)'s Economic Opportunity Areas (EOAs) and the AVAP in general are not sufficiently protective, the County disagrees. Further, as discussed in more detail in Final EIR response to Comment F.8-20, the Project has been designed to be consistent with the AVAP's "Rural Preservation Strategy", which is intended to ensure that the "growing population's need for additional housing and employment opportunities is balanced against the need to respect historical heritage and preserve the natural environment" and focuses on "preserving the rural lifestyle and rural character of the region." (AVAP, pages I-6, -7) Consistent with these goals, the Project appropriately concentrates development in the West EOA so that areas around it can be preserved and maintained at low density, or for agricultural use. (*Id*., page I-8) With regard to Project-

related impacts in areas mentioned by the Commenter, please see Draft EIR sections 5.1 (earthquakes), 5.3 and 5.16 (fire), 5.2 (flooding), 5.11 (air pollution and public health), 5.4 (water pollution). This comment does not specifically address the adequacy of the EIR, and no further response is required.

Response to Comment ADD-F.19-4:

With regard to the assertion that the AVAP's EOAs and the AVAP in general are not sufficiently protective, the County disagrees. The Project appropriately concentrates development in the West EOA consistent with the AVAP's Rural Preservation Strategy, so that areas around it can be preserved and maintained at low density, or for agricultural use. (AVAP, page I-8) Please see Final EIR, response to Comment F.8-20 for further discussion of this topic. With regard to the Project's consistency with AVAP policies, please see Draft EIR, Section 5.8, Land Use. This comment does not address the adequacy of the EIR, and no further response is required.

Response to Comment ADD-F.19-5:

With regard to the assertion that the AVAP's EOAs and the AVAP in general are not sufficiently protective, the County disagrees. The Project appropriately concentrates development in the West EOA consistent with the AVAP's Rural Preservation Strategy, so that areas around it can be preserved and maintained at low density, or for agricultural use. (AVAP, page I-8) Please see Final EIR, response to Comment F.8-20 for further discussion of this topic. With regard to the Project's consistency with AVAP policies, please see Draft EIR, Section 5.8, Land Use, which demonstrates consistency with these policies. This comment does not address the adequacy of the EIR, and no further response is required.

Response to Comment ADD-F.19-6:

The County is aware that the Caltrans preferred alternative for the Northwest 138 Corridor Project includes recommendations for roadway access to SR-138 that differs from the AVAP. Accordingly, the EIR includes analysis consistent with the AVAP assumptions as well as the access points specified in the Caltrans preferred alternative. State Route 138 is under the jurisdiction of Caltrans, not the County, and the County does not have the legal authority to determine or limit access points along SR-138 in the vicinity of the Project site. As contemplated by the AVAP, as part of the Centennial Specific Plan EIR, the County prepared the November 2017 Supplemental Traffic Study (STS) to analyze the Project's traffic impacts consistent with the SR-138 access points ultimately selected by Caltrans to be its preferred alternative (see Draft EIR Appendix 5.19-C).

The STS evaluates impacts using the Highway Capacity Manual (HCM) methodology and the North County Sub-Area Model utilized in the NW SR-138 Final EIR/EIS as updated by Los Angeles County to reflect the AVAP approved by the County in June 2015. The STS determined that the implementation of Caltrans' preferred SR-138 alignment, and additional improvements to SR-138 that may be required under cumulative conditions with full Project buildout, will not result in any new or more severe significant physical construction and

operational impacts than considered in the NW SR-138 Final EIR/EIS and the Project Draft EIR. The STS also demonstrates that, using the HCM methodology, the Project will not result in any new or more severe significant impacts to applicable highway segments, intersections and ramps than considered in the Project Draft EIR. With regard to the Commenter's assertion that the Project will add to impacts on segments of Pine Canyon Road, Significant use of Pine Canyon Road by Project residents or non-residents seeking alternative routes to State Route (SR) 138, which extend east and west to the north of Pine Ridge Road is not likely to occur for several reasons. First, the use of Pine Ridge Road to traverse east and west along the Antelope Valley would require substantially longer travel times than travel on SR-138 even under relatively congested conditions. Travel from the Project site or from SR-138 to Three Points Road via Pine Canyon Road would take significantly longer than using SR-138. In addition, under current conditions, the use of Pine Canyon Road to bypass SR-138 would increase travel time by approximately 300 percent as compared to using SR-138 (26 minutes versus 8 minutes). Finally, as discussed in the Draft EIR, Caltrans is planning to improve SR-138 by implementing the Northwest State Route 138 Corridor Improvement Project ("NW SR-138 project").

With regard to the Project's relationship to the NW Highway 138 Improvement Project, the County has fully addressed this issue. Please see response to Comment ADD-F.10-5.

Response to Comment ADD-F.19-7

The information the Commenter presents about local traffic patterns around Palmdale, Santa Clarita, and Lancaster was considered by the Regional Planning Commission and will be provided to the Board of Supervisors. As noted in the EIR, Project-related traffic is reasonably anticipated to utilize the major regional roadways across a broad geographical area, shown in EIR Exhibit 3-2, Project Vicinity Map. The major highway in the area is SR-138, which runs through the southern portion of the Project site and is currently built as a two-lane rural highway. The primary regional access road is via I-5, an eight-lane portion of the highway that connects with SR-138 approximately one mile west of the Project site's westernmost boundary. Major access to the Antelope Valley is via SR-14, which connects with I-5 southeast of the Project site in the Santa Clarita Valley; SR-14 then moves northeast and becomes the major north-south access into Lancaster and Palmdale. Just north of Lancaster, SR-14 connects with SR-138 east of the Project area (see EIR Exhibit 3-1, Regional Location).

Whereas the mountain roadways mentioned by the Commenter can be a viable alternative for Palmdale and Lancaster residents to avoid recurring congestion on SR-14, the Centennial EIR traffic study determined that the future residents of Centennial would experience shorter travel times to and from Palmdale, Lancaster, and Santa Clarita by using the main highways (SR-138, SR-14, and I-5) versus using the mountain roadways.

For example, analysis of SR-138 indicated that level of service (LOS) would generally be LOS B and C during peak travel times with full development of Centennial together with the SR-138 improvements identified as mitigation (Final EIR Appendix 5.10-C, Table 3-8). With LOS B and C conditions, travel times on SR-138 would experience minimal added delay with

average speeds of 59 to 60 mph (Draft EIR Table 5.10-15). Based on these travel speeds, a trip from Centennial to Palmdale during the peak hour by way of a route that utilizes SR-138 and SR-14 is approximately 44 miles in length with a travel time of approximately 40 minutes on what will be a fully improved expressway and a freeway. In comparison, a route that utilizes Pine Canyon Road and Elizabeth Lake Road is approximately 39 miles in length with a travel time of approximately 52 minutes, which is 30 percent longer than the SR-138 and SR-14 route.

Pine Canyon Road and Elizabeth Lake Road are each rural two-lane roadways subject to additional delay due to slower moving vehicles and the lack of passing areas. Since the SR-138/SR-14 route represents a substantial savings in travel time, and since the route utilizes what will be a fully improved expressway and a freeway with ample opportunities to pass other vehicles, the number of vehicle trips from Centennial to use Pine Canyon Road and Elizabeth Lake Road is expected to be minimal. Analysis that was done by the County when developing the AVAP determined that traffic on Elizabeth Lake Road with full development of the Centennial Project would remain at LOS A conditions with volume to capacity (V/C) ratios on the roadway segments ranging from 0.31 to 0.58.

Similarly, from Centennial to Castaic, a route that utilizes SR-138 and I-5 is approximately 32 miles in length with a travel time of approximately 30 minutes on what will be a fully improved expressway and a freeway. Analysis of I-5 indicated that LOS would generally be LOS C and D during peak travel times with full development of Centennial (Final EIR Appendix 5.10-C, Table 4-2). With LOS C and D conditions, travel times on I-5 would experience minimal added delay with average speeds of 58 to 68 mph (Draft EIR Table 5.10-9). In comparison, a route that utilizes Pine Canyon Road and Lake Hughes Road is approximately 41 miles in length with a travel time of approximately 58 minutes, which is almost double the travel time compared to the SR-138 and I-5 route. Pine Canyon Road and Lake Hughes Road are each rural two-lane roadways subject to additional delay due to slower moving vehicles and the lack of passing areas. Since the SR-138/I-5 route represents a substantial savings in travel time, and since the route utilizes what will be a fully improved expressway and a freeway with ample opportunities to pass other vehicles, the number of vehicle trips from Centennial to use Pine Canyon Road and Lake Hughes Road is expected to be minimal.

Response to Comment ADD-F.19-8

As noted in response to Comment ADD-F.19-7, traffic generated by Centennial is forecast to primarily utilize I-5 for trips between Centennial and the Santa Clarita Valley as that route is shorter in both distance and time under typical conditions when compared to the mountain roadways such as Lake Hughes Road. However, natural events including snowfall and wildfires can sometime result in the need for segments of I-5 to be closed. When that occurs, the northbound direction of I-5 is typically closed at Castaic since that is the last community with services for motorists such as food and lodging. Closures typically last for less than 24 hours and are required no more than a few times each year. Centennial traffic could result in temporary increases in traffic volumes on Lake Hughes Road, Pine Canyon Road, and Three Points Road to avoid a closure of I-5. Centennial traffic is also anticipated to utilize SR-14 as

a bypass route despite it being a longer distance since it is a fully improved highway that is easier to drive during inclement weather conditions. As any increase in traffic on the mountain roadways due to a natural event would be temporary, it would not be considered a significant Project impact. For further discussion with regard to I-5 and SR-138 traffic jams and potential closures, please see responses to Comments F.3A-63, F.3A-64, and F.7-16

Response to Comment ADD-F.19-9

The information the Commenter presents about the differences between the SR-138 improvements as proposed by Caltrans in the Northwest Highway 138 Project Report and Environmental Document in comparison to that described by the County for the Antelope Valley Area Plan (AVAP) study will be provided to the Board of Supervisors. As noted in the comment, the preferred alternative selected by Caltrans differs in some respects from the highway configuration identified by the County in the Antelope Valley Area Plan (AVAP) study. These differences are primarily in regard to where SR-138 would be accessed from the County roadways. Because of these differences in highway access, the Centennial EIR includes traffic studies based on both configurations. For either case, the Centennial EIR identifies impacts and presents the roadway improvements that effectively mitigate Project and cumulative impacts and that are consistent with either access configuration. With regard to the Project's relationship to the NW Highway 138 Improvement Project, please see response to Comment ADD-F.10-5.

Response to Comment ADD-F.19-10

The Commenter summarizes EIR discussion regarding Project-related impacts and necessary improvements. As disclosed in the Final EIR, in July 2017 Caltrans submitted a comment letter requesting that the Project traffic analysis discuss and incorporate the Alt 2 facilities to be consistent with the NW SR-138 FEIR. In response, the Centennial Specific Plan Supplemental Traffic Study (STS) was prepared to incorporate Alt 2 with the Project traffic analysis. The STS is attached as Appendix 5.10-C of the Final EIR. As in the Draft EIR, the STS considers Project impacts under existing and future (cumulative) traffic conditions. Impacts are evaluated using the Highway Capacity Manual (HCM) methodology utilized in the NW SR-138 FEIR. As discussed on Draft EIR pages 5.10-2 to 5.10-5, both the Draft EIR and the NW SR-138 FEIR use the North County Sub-Area Model to evaluate traffic conditions in north Los Angeles County. The Draft EIR utilizes a more recent version of the model that was updated by Los Angeles County to reflect the Antelope Valley Area Plan (AVAP) approved by the County in June 2015. The STS also uses the traffic forecasts from the updated North County Sub-Area Model provided by the County to analyze Project and cumulative impacts to reflect the most current information available regarding traffic conditions in the North County region.

The implementation of Alt 2 would accommodate approximately 75 percent of the Project's full buildout traffic under interim cumulative conditions, and additional improvements consistent with the SR-138 facilities considered in the Draft EIR would be required to accommodate all of the Project's full buildout traffic under long-range cumulative conditions. The NW SR-138 FEIR also clarified certain aspects of the SR-138 design details that would

be implemented with Alt 2, including the number and locations of intersections along SR-138 from I-5 to SR-14. The NW SR-138 FEIR addressed several types of intersection configurations for each location but defers selection of the final configurations to the SR-138 design phase. Subject to minor adjustments for consistency with these Alt 2 design details, the SR-138 facilities that would result from the additional improvements to Alt 2 required for full Project buildout under long-range cumulative conditions as described in the STS are substantially similar to the full buildout SR-138 facilities discussed in the Draft EIR. The STS provides a summary of SR-138 improvements in the context of the implementation of Alt 2, including the following:

- To connect the Project circulation system to the Alt 2 facilities, an additional intersection and certain intersection upgrades, such as additional lanes, will be constructed at locations where SR-138 borders the Specific Plan boundary.[3401]
- The implementation of Alt 2, including minor modifications in certain intersection locations within the Specific Plan area to accommodate the Alt 2 design details, that accommodate approximately 75 percent of the Project's full buildout traffic under interim cumulative traffic conditions.[3402]
- SR-138 improvements in addition to Alt 2 that would be required to accommodate all of the Project's buildout traffic under the long-range cumulative traffic conditions projected in the Draft EIR and STS.[3403]

As discussed in the STS[3404], the Project's mitigation measures have been clarified to reflect the implementation of these improvements with Alt 2. As required by MMs 10-3 and 10-4, the Project will contribute fair share funding or provide funding for SR-138 improvements in accordance with a mitigation agreement with Caltrans for the implementation of Alt 2, improvements required to connect the Project circulation system with the Alt 2 facilities, and, if confirmed in traffic studies submitted in conjunction with the review and approval process for future Project tract maps, additional SR-138 improvements that may be required to accommodate full Project buildout under cumulative traffic conditions. Updated improvements necessary for full Project buildout have appropriately been studied in this Project EIR, and not the AVAP EIR or NW Hwy 138 Improvement Project EIR, because they are separate projects. Please see Final EIR, responses to Comments B.3-6 and B.3-7 for further discussion of Project-related improvements as they relate to Alt 2 of the NW Hwy 138 Improvement Project.

Response to Comment ADD-F.19-11

The County has incorporated all feasible mitigation measures and conditions to reduce traffic-related impacts on surrounding communities to a less than significant level for full Project buildout with mitigation implemented. With regard to suggestions for additional or different roadway access points and roadway improvements, these are not necessary to

[3401] *Id.,* Appendix 5.10-C, Sections 2.2 and 2.3
[3402] *Id.,* Appendix 5.10-C, Section 2.1
[3403] *Id.,* Appendix 5.10-C, Section 2.4
[3404] *Id.,* Appendix 5.10-C, Section 5

avoid significant impacts, and the County has fully addressed this in responses to Comments ADD-F.11-7 and ADD-F.11-8, and Responses to Testimony RPC-143, RPC-146. With regard to the Project's relationship to the NW Highway 138 Improvement Project, please see response to Comment ADD-F.10-5.

Response to Comment ADD-F.19-12

With regard to the Project's relationship to the NW Highway 138 Improvement Project, the County has fully addressed this issue in response to Comment ADD-F.10-5. With regard to the Project's growth-inducing impact discussion, the Commenter misrepresents EIR discussion. The EIR appropriately analyzes Project-related growth-inducing impacts and comes to differing conclusions when analyzing the Project in relation to regional planning and anticipated regional growth projections versus in relation to existing Project site conditions. In relation to regional planning, the Draft EIR concludes that because the Project is consistent with growth projections, allowable land uses, and development densities/intensities in the AVAP and because the EIR for the AVAP adequately analyzed the growth-inducing impacts of the AVAP, the Project would not have any growth-inducing impacts that were not previously analyzed in that certified EIR, and would not be considered growth-inducing in relation to planned-for and foreseeably anticipated regional growth. (Draft EIR, page 6-2). However, with regard to the Project's impacts in comparison to existing Project site conditions, the Draft EIR conservatively concludes that the existence of the Project makes it reasonably foreseeable that additional development proposals seeking AVAP amendments could be made outside the West EOA, which is considered a significant, adverse indirect growth-inducing impact. (Draft EIR, pages 7-19, 6-6 to 6-9) For further discussion of growth-inducement, please see Final EIR, responses to Comments F.8-47 through F.8-49.

Response to Comment ADD-F.19-13:

With regard to fire, the Commenter's opinion that less dense development is preferable is noted, was heard by the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. However, the County concludes that the EIR thoroughly and appropriately evaluates the Project's fire safety impacts under two thresholds of significance. First, the Draft EIR considers whether the Project would expose people or structures to a significant risk of loss, injury or death involving fires because it is located (i) within a Very High Fire Hazard Severity Zone (VHFHSZ), (ii) within a high fire hazard area with inadequate access, (iii) within an area with inadequate water and pressure to meet fire flow standards, or (iv) within proximity to land uses that have the potential for dangerous fire hazard. Second, the Draft EIR considers whether the Project constitutes a potentially dangerous fire hazard. The Draft EIR determined that, with implementation of MM 3-9, Project impacts related to fire hazards would be less than significant under both applicable thresholds of significance. The Draft EIR concluded that Project impacts related to fire safety would be less than significant only after taking into consideration (i) Project site access, (ii) Project site water flows, (iii) Project site topography, (iv) Project site vegetative cover, (v) existing and proposed regulatory controls, (vi) existing mutual aid agreements between federal, state, and local fire safety service providers, and (vii) Project improvements and

mitigation measures related to landscaping and vegetation management, building construction, circulation, public utilities, and fire protection services, including but not limited to MM 3-9. Specifically, with regard to protection from fire for surrounding open space areas and wildlife residing there, MM 3-9 requires implementation of a Fuel Modification Plan, whose major components will ensure a minimum 20-foot setback from the edge of any structures; an irrigation and transition zone from 20-100 feet away, and native brush thinning zone between 100 and 200 feet away from structures. For further details of fuel modification requirements, please see Draft EIR, Section 5.3, and Final EIR, responses to Comments A.2-6, F.8-63, and F.8-64. The EIR recognizes that the Project site sometimes experiences high wind events, and this has been taken into account in Project impact analyses. (Draft EIR, pages 5.11-23, 5.3-17) With regard to wildfire and the urban-wildlands interface, please also see responses to Comments ADD-G.69-1 through ADD-G.69-6 and ADD-G.70-1, in this document.

Response to Comment ADD-F.19-14:

Contrary to the Commenter's assertion, the EIR does not avoid appropriate evaluation of the Project site and surrounding area's use for wildlife movement. Rather, the EIR thoroughly discusses impacts to habitat connectivity and wildlife movement, and the Project design and mitigation would ensure less than significant impacts. In the wildlife movement assessment, connectivity between the Tehachapi Mountains and the San Gabriel Mountains was considered in detail (Draft EIR, pages 5.7-50 to -64, -164 to -170). The thorough assessment concluded that although maintaining baseline connectivity between the two regions is essential, development of the Project would not significantly impact movement between these regions (*Id.,* page 5.7-166). The wildlife movement impact analysis beginning on page Draft EIR page 5.7-164 does conclude that development of the Project site will result in some losses of areas that may be used for foraging and/or breeding for species; pathways to or from foraging or breeding grounds on the Project site, such as along ridge-lines or canyon bottoms, may become "dead ends" to through dispersal. However, these losses are not expected to significantly impact wildlife movement, and sufficient habitat connectivity would be retained in the region for these species, especially given the substantial amount of similar terrain in the northwestern Antelope Valley area. Further, two regional conservation plans, the Tejon Ranch Conservation and Land Use Agreement and the TUMSHCP, although not providing mitigation for Centennial, would act in concert with the Centennial mitigation preserves to help sustain the functionality of the regional landscape linkage for future wildlife populations. Multi-generational gene flow (a series of connected wildlife movement events over time, allowing for genes to pass within and between populations) among wildlife populations in the region is expected to be sustained in the open spaces on and off the site that will remain following Project implementation. These open spaces provide sufficient habitat connectivity to allow for such gene flow. Implementation of MM 7-14, which designates a SR-138 wildlife underpass (along with a 50-foot open space buffer) where the current intersection with National Cement Plant Road exists, will also allow for local wildlife movement to pass through the Project area down to SEA 17.

The direct impacts of Project development on wildlife movement, therefore, are appropriately considered less than significant after mitigation for local wildlife movement

impacts. Nonetheless, the Draft EIR (page 7-17) discloses that the Project when combined with other projects in the region would result in a cumulatively significant impact on wildlife movement. Lastly, the Project design is consistent with the Antelope Valley Area Plan (AVAP) including with regard to open space designations, SEA protection, and preservation of habitat linkages. With regard to the use of the word "probably" in EIR discussion of local and regional wildlife movement, such language is not indicative of a lack of appropriate study. The EIR wildlife movement assessment is based on detailed scientific study, including site-specific studies listed in Draft EIR Table 5.7-2.

The crossings that the Commenter suggests through the Project site are neither necessary nor relatively effective. In most circumstances, open space linkages within development, especially linear narrow corridors, have not been shown to enhance survival of the species. (Draft EIR, page 5.7-54). Rather, in development adjacent to wildlands, where development is of such a density that only limited movement corridors are an option, designs that separate development from protected open spaces by use of hardened edges are preferred design strategies, as discussed further in the Draft EIR at pages 5.7-54 to -55.

For further discussion of the adequacy of the EIR's wildlife movement and habitat connectivity impact analyses, please see Final EIR, responses to Comments B.2-3, B.4-34 to B.4-37, B.4-56, B.4-57, B.4-75, F.3-23 to F.3-25, F.3A-32 to F.3A-34, F.5-2, F.7-22, F.8-109, F.8-110, and F.8-165 through F.8-169.

Response to Comment ADD-F.19-15:

This comment describes various results of the SR-138 Improvement Project EIR technical study, which looked at wildlife use along SR-138 through the Antelope Valley and including the Centennial Project site. The Commenter questions the studies performed at culverts along I-5, between Gorman and the Grapevine, and the assertion that those structures would provide adequate crossing opportunities for wildlife in the area. In response, pages 5.7-56 through 5.7-64 of the Draft EIR provide a discussion of large mammal life requirements, and pages 5.7-56 through 5.7-64 of the Draft EIR address wildlife movement/linkages. The Final EIR does not make the assertion mentioned in the comment. The Final EIR analyzes the impacts of the proposed Project on wildlife movement and its potential to affect the persistence of regional populations of wildlife species. As discussed in the Draft EIR (pages 5.7-56 through 5.7-64), based largely on an independent study (South Coast Missing Linkages- Linkage Design for the Tehachapi Connection) that specifically researched and delineated regional movement areas critical for connecting the Tehachapis with the coastal ranges and San Gabriel Mountains, the Project is expected to have less than significant impacts on these identified critical linkage areas. As a result, mitigation is not required with regard to wildlife movement. Relevant studies performed at culverts along I-5, between Gorman and the Grapevine, are appropriate references to further verify the validity of independent studies looking at critical linkages in the region. The constraints of the various features in the Project area are part of the existing condition, and as such the Project is not required to determine the adequacy of those structures. In conclusion, the Draft EIR, therefore, does not assert adequacy or lack thereof of these structures.

The wildlife observations presented in this comment are not inconsistent with the Draft and Final EIR wildlife movement and corridor impact analyses and conclusions. Use of lands within the Centennial Project site by various wildlife species is not disputed, and is described in the Draft EIR on pages 5.7-56 through 5.7-64. Wildlife using the site are expected to move between areas both within the site and to and from the site and other areas. Although these actions constitute wildlife movement, they would fall largely into the local movement category, and loss of local movement areas is not expected to affect regional population sustainability, as discussed further in the DEIR.

For further discussion of this topic, please also refer to Final EIR, responses to Comments B.4-56, B.4-57, F.5-13, F.7-21, F.8-109, F.8-110, and F.8-168, as well as responses to Comments ADD-G.59-2, ADD-G.59-3, ADD-G.59-4, ADD-G.59-5, and ADD-G.59-6.

Response to Comment ADD-F.19-16

The Commenter states their belief that the Project design features are necessary to provide several safe crossing areas at I-5 and SR-138 for large as well as medium and small mammals. Section 5.7, Biological Resources, and Section 7, Cumulative Impacts, of the Draft EIR assess all aspects of Project-related impacts to wildlife movement and corridors. As discussed in Final EIR response to Comment F.8-109, the Project site does provide unobstructed local movement opportunities for small animals and aerially dispersing plants and animals that reside in the Project area. As discussed on page 5 of the Draft Interim Wildlife Movement Corridor Assessment (WM-1 of Appendix 5.7-B of the Draft EIR), mountain lion is expected to occasionally occur on the site in search of prey, though there appears to be very little suitable denning habitat. Further, because the majority of the Project impact footprint is sparsely vegetated and does not provide adequate cover, it is not expected to be heavily utilized by species such a mule deer or mountain lion.

The Project has incorporated two undercrossings to facilitate local movement across SR-138. MM-14, described on Draft EIR pages 5.7-190 and 5.7-191, sets forth the specific requirements for the undercrossing located where the SR-138 crosses the Project's western border near its current intersection with Cement Plant Road, and requires an open space buffer near the bridge over the aqueduct for the Cement Plant Road and other areas to allow for greater wildlife mobility than in the existing condition. In addition, PDF 7-7 on page 5.7-139 of the Draft EIR requires the Applicant to explore locating a wildlife-friendly crossing across the Aqueduct with the California Department of Water Resources. The ideal location for such a crossing would be adjacent to Quail Lake or adjacent to the new bridge proposed across the Aqueduct. Final design of any such crossing must be reviewed and approved by Los Angeles County.

With regard to wildlife linkages, and potential barriers to those linkages (e.g., SR-138), please refer to Draft EIR pages 5.7-52 through 5.7-64 and 5.7-164 through 5.7-166, as well as Final EIR response to Comment F.5-13.

The Draft EIR also discusses the appropriateness of discouraging wildlife from entering into developed areas. As stated on page 5.7-54 of the Draft EIR, "constrained landscape linkages

may subject wildlife to higher mortality from edge effects and increased contact with humans, and constraints on the linkage can result in lower (not greater) likelihoods of regional persistence. In most circumstances, open space linkages within development, especially linear narrow corridors, have not been shown to enhance survival of the species that are most in need of conservation attention. In development adjacent to wildlands, where development is of such a density that only limited movement corridors are an option, designs that separate development from protected open spaces by use of hardened edges are the preferred design strategies (MacArthur and Wilson 1967; Soule 1987; Harris and Gallagher 1989; Bennett 1990)." In summary, the Draft EIR advocates for appropriately designed wildlife corridors (e.g., not "linear/narrow").

Furthermore, the Draft EIR (as well as multiple wildlife movement studies included in Appendix 5.7-B of the Draft EIR) acknowledges the large home ranges of certain species such as mountain lion, and states that mountain lion is expected to occur infrequently on the Project site. Regional movement linkages are critically important for genetic flow and the health of regional mountain lion population, whereas a small portion of an individual mountain lion's home range or general use area, such as the eastern portions of the site, is not critically important.

With regard to mountain lion specifically, neither the Draft EIR nor the Final EIR suggest that the Project site is not within the mountain lion's home range. See, for example, Draft EIR pages 5.7-50 to -51, -63, -161, -166. Impacts to these species are considered in the Environmental Impacts section (Section 5.7.6 of the Draft EIR) for general wildlife. As noted in the Draft EIR, potentially significant impacts to wildlife movement and habitat for general wildlife that would result from implementing the Project would be reduced to less than significant levels with implementation of MMs 7-14 through MM 7-18. Please see response to Comment ADD-G.59-2 for State CEQA guideline requirements for discussing the mountain lion.

For further discussion of this topic, please also refer to Final EIR responses to Comments B.4-56, B.4-57, F.5-13, F.7-21, F.8-109, F.8-110, and F.8-168, and responses to Comments ADD-G.59-2, ADD-G.59-3, ADD-G.59-4, ADD-G.59-5, and ADD-G.59-6. With regard to SEATAC and its relationship to the Project, please see response to Comment ADD-F.19-27.

Response to Comment ADD-F.19-17:

The Commenter mischaracterizes the CDFW's request in its comment letter on the Draft EIR (Final EIR, Comment Letter D.4). CDFW recommended that the Project's Integrated Pest Management Program prohibit the use of all rodenticides containing anticoagulants or other toxins that may result in secondary poising in non-target wildlife (see Final EIR, Volume 1, Comment B.4-16) Only if this could not feasibly be required, the CDFW then recommended regular monitoring of blood samples from wildlife to determine impacts. (Ibid.) Because the CDFW's primary suggestion was incorporated into MM 4-2 and this requirement is binding, CDFW's suggestion for testing is no longer applicable. With regard to the enforcement of the prohibition, CC&Rs are a binding enforcement mechanism, and violations of the CC&Rs are subject to private enforcement by the master developer and the HOA. The County also has

enforcement authority for implementation of mitigation measure requirements. See Final EIR, response to Comment B.4-16 for further discussion.

Response to Comment ADD-F.19-18:

As discussed further in response to Comment ADD-F.19-17, the Commenter's suggestion is noted, but is not necessary to ensure less than significant impacts. CC&Rs are a binding enforcement mechanism, and violations of the CC&Rs are subject to private enforcement by the master developer and the HOA. The County also has enforcement authority for implementation of mitigation measure requirements. See Final EIR, response to Comment B.4-16 for further discussion.

Response to Comment ADD-F.19-19:

The Commenter appears to assert that because signatories to the Ranchwide Agreement signed non-disclosure agreements during negotiations, and have agreed not to oppose the Project, important scientific information relevant to Project impacts has not been disclosed. This is incorrect. The entirety of the Project site has been evaluated for biological resources and to appropriately assess Project-related impacts. The EIR, including its biological impact analysis, complies with CEQA requirements, as further discussed in response to Comment ADD-F.13-16. Further, as appropriate under CEQA, the Draft EIR focuses on impacts associated with solely the Project site, and not the Tejon Ranch as a whole.

With regard to ranch access, the Commenter's opinion is noted, but access does not relate to the adequacy of the EIR. However, for informational purposes, the County notes that many scientists have been and continue to be allowed access to the ranch per the Ranchwide Agreement (RWA) and the Ranch-wide Management Plan (RWMP), and thorough, independent scientific review of Tejon Ranch has been conducted. The Project Applicant addressed ranch access in its July 11, 2018 testimony to the Regional Planning Commission, explaining that the RWA does not provide unrestricted public access to Tejon Ranch, but rather provides the express right to withhold access permission. The Applicant further explained that its intention has been to deny access to Center for Biological Diversity and their partner organizations, such as the California Native Plant Society, who have active, ongoing litigation against Kern County, Los Angeles County, and Tejon Ranch and oppose all Tejon Ranch projects. With regard to requirements for public access, Section 3.11 of the RWA indicates that the Owner shall provide significant and appropriate access to Tejon Ranch to the public. Section 3.11 of the RWA required the preparation of a Public Access Plan as part of the RWMP, which has been duly prepared, and the Applicant has been implementing the public access plan. See Final EIR, Appendix 5.7-D, Ranchwide Management Plan, Volume 3, Public Access Plan, for more information. Neither the RWA nor the RWMP restricts the Applicant's legal right to refuse access to its private property if it is not "appropriate".

Response to Comment ADD-F.19-20:

With regard to illegal killing of mountain lions, it is not Tejon Ranch policy to do so. As indicated in the article referenced by the Commenter, the Applicant paid applicable fines and

has publicly explained that it expresses "deep regret that such incidents took place on ranch property and the company is doing everything within its power to ensure that something like this never happens again." Further, the killings "occurred without the knowledge and/or consent of Tejon Ranch's senior officers." This comment does not address the adequacy of the EIR, and no further response is required.

Response to Comment ADD-F.19-21

The quote provided by the Commenter is from a discussion in Draft EIR Section 5.7, Biological Resources, addressing impacts related to exotic and pest wildlife. (Draft EIR, page 5.7-168) The Commenter has provided just a portion of the discussion, which goes on to note that implementation of mitigation measures MM 7-16 through 7-18 would reduce the impacts identified to a less than significant level. (*Ibid*.) With regard to edge effects and the Commenter's suggested "buffer zone" between development and open space, the EIR thoroughly and appropriately analyzes and discloses potential edge and/or indirect impacts on surrounding areas consistent with CEQA requirements and identifies all feasible mitigation to reduce such impacts. The Project site's development areas and preserved areas have been specifically chosen with the intent to minimize edge effects so that the biological resources within them are not jeopardized by the Project or potential future development in the region. For further discussion of edge effects, please see Draft EIR, Section 5.7, pages 5.7-54, PDF 7-1 at pages 5.7-136 and 5.7-160. With regard to uses permitted in the Project's open spaces, see response to Comment ADD-F.19-22.

Response to Comment ADD-F.19-22:

With regard to the Commenter's assertion that Tejon Ranch Conservancy's management of mitigation lands is a conflict of interest and a different organization should be identified for management, the County disagrees. The Tejon Ranch Conservancy was created by the RWA to serve as an independent, third party responsible for holding conservation easements and managing public access, scientific study, and restoration activities in the open space conservation areas of Tejon Ranch. The Conservancy has a twelve-member Board of Directors, with four members appointed by the environmental groups who are signatories to the RWA (Natural Resources Defense Council, Sierra Club, California Audubon, Endangered Habitats League, and Planning & Conservation League), four members appointed by Tejon Ranch, and four independent Board members. The County also has authority to and will monitor compliance with binding mitigation measure requirements on an ongoing basis.

With regard to hunting, all recreational hunting is prohibited in the On-Site Mitigation Preserve, per MM 7-23, and in the Off-Site Mitigation Preserve, hunting is restricted to Ranch authorized individuals within designated hunting areas. Hunting on the ranch as a whole is subject to restriction in the TUMSHCP, and hunting areas are considered compatible in the Off-Site Mitigation Preserve because no new disturbances or increases in hunting permit issuances is anticipated. Further, all hunting activities must be coordinated with the California Department of Fish and Wildlife, and the Project Applicant is not entitled to remove or kill animals disrupting the hunting program and has no policy to do so.

With regard to Project open space use (the Commenter asks about hunting, golf courses, parking, oil and gas, crops, and water extraction, for example), specific uses are addressed in Specific Plan Table 2-16. Further, the EIR (see Final EIR, response to Comment F.8-18) is clear about permitted uses for the four open space subdesignations, which are:

- *On-Site Mitigation Preserve*: Uses restricted to use and continued maintenance of existing ranch roads and trails for access, as well hiking and biking for private inholding owners and permitted Ranch guests. Public access and recreational hunting shall be prohibited. Authorized motorized vehicles including but not limited to Tejon Ranch employees, utility maintenance vehicles, that have a Tejon Ranch permit and emergency vehicles shall be restricted to existing ranch roads and all recreational motorized vehicles shall be prohibited. No improvements beyond what is necessary to maintain roads, fences, etcetera, in their current state shall be allowed, with the exception of the placement of two new water towers. Only habitat enhancement, restoration and creation activities approved by the County shall be permitted. Grazing shall be allowed to continue strictly for resource management values.
- *Off-Site Mitigation Preserve*: These areas, although available for mitigation including enhancement, restoration, and enhancement, are not available for mitigation acreage value as preservation. Uses within the Off-site Mitigation Preserve shall be restricted to use and continued maintenance of existing ranch roads and trails for access as well as hiking and biking for private inholding owners and permitted Ranch guests. Public access shall be prohibited. Authorized motorized vehicles including but not limited to Tejon Ranch employees, utility maintenance vehicles, that have a Tejon Ranch permit and emergency vehicles shall be restricted to existing ranch roads and all recreational motorized vehicles shall be prohibited. No improvements beyond what is necessary to maintain roads, fences, etcetera, in their current state shall be allowed, Recreational hunting shall be restricted to Ranch authorized individuals and within designated hunting areas only. Only habitat enhancement, restoration and creation activities approved by the County shall be permitted. Grazing shall be allowed to continue strictly for resource management values.
- *Disturbed Green Space*: Disturbed Green Space will be amenities for the Project and could include one or more of the following uses: golf course, equestrian, natural parks, trails, cultural monuments, water retention basins, open space uses, utilities, grading, crop production, grazing, special events, and mitigation activities. No Mitigation credit has been taken into account for the Project impacts from the Green Spaces. While Green Spaces could be impacted initially, the concept of these areas is to restore it for community amenities and visual aesthetics between neighborhoods of development.
- *Undisturbed Green Space*: uses are restricted to continued maintenance of existing ranch roads and trails for access as well as hiking and biking for private inholding owners and permitted Ranch guests. Public access and recreational hunting shall be prohibited. Authorized motorized vehicles including but not limited to Tejon Ranch employees, utility maintenance vehicles, that have a Tejon Ranch permit and emergency vehicles shall be restricted to existing ranch roads and all recreational

motorized vehicles shall be prohibited. Restricted access signage shall be posted along interface with public areas. Wildlife friendly fencing will be used to demarcate the edge of restricted access green space.

Response to Comment ADD-F.19-23

The County will make final determinations about the feasibility of Alternatives A and E when it adopts CEQA findings for the EIR. Per Public Resources Code § 21081(a)(3) and CEQA Guidelines § 15091(c)(3), a lead agency in its CEQA findings may reject a project alternative it finds to be "infeasible." When considering the feasibility of a project alternative, CEQA provides that the lead agency may take into account economic, environmental, social, technological, and legal factors, as well as "other considerations." See, Public Resources Code § 21081(a)(3); CEQA Guidelines § 15091(a)(3); *California Native Plant Soc'y v. City of Santa Cruz* (2009) 177 Cal.App.4th 957, 1002. After weighing these considerations, a lead agency may determine that a project is undesirable from a policy perspective and on that basis reject a project alternative as infeasible. *City of Del Mar v. City of San Diego* (1982) 133 Cal.App.3d 401, 417.

This comment's stated preference first for Alternatives A and then E over the Project is noted, was provided to the Regional Planning Commission, and will be provided to the Board of Supervisors for their consideration. Alternative A, No Project, assumes that existing cattle grazing and agricultural land uses would remain and that no new development would occur on the Project site. (Draft EIR, page 8-16). While many of the impacts of development on the site would be avoided, Alternative A would result in higher risk of wildfire, because no fire prevention program would be in place. (Draft EIR, page 8-27) Further, Alternative A would not further County planning efforts to meet the future housing and employment needs in Los Angeles County, and would not be consistent with the intent of the AVAP or the West EOA within the Project's development footprint. (Draft EIR, page 8-28) The Project is proposed with the objective of creating a self-contained, self-sustaining community in which people could live and work in the same community; however, implementation of this Alternative would not support this primary goal due to the lack of new development or provision of any housing and employment opportunities on the site. (Draft EIR, page 8-30)

With regard to Alternative E, as this comment correctly notes, the EIR identifies Alternative E as the "environmentally superior alternative" under CEQA. However, Alternative E would not provide a second vehicle crossing over the California Aqueduct, which could limit emergency evacuation options for Project residents and thus be inconsistent with County policies regarding public safety. Alternative E would not reduce any of the Project's significant and unavoidable impacts to less-than-significant levels, as discussed on Draft EIR page 8-60, though it would somewhat reduce some significant impacts as compared to the Project. Alternative E would not provide a regional trail connection that is proposed by the Project and could result in higher costs for public infrastructure improvements that correlate with higher intensity of uses, such as parks.

In addition, Alternative E implicates policy considerations that are not discussed in the preliminary draft findings but could be added to the final findings. For example, if approved,

Alternative E would eliminate the Project's proposed Village Nine, and Village Eight's Low Density Residential-designated lands located east of 300th Street would instead be designated as Very Low Residential, as explained on Draft EIR page 8-18. Thus, Alternative E would provide approximately 865 fewer acres of land designated for Low Density Residential uses, as compared to the proposed Project. Although Alternative E would provide the same number of residential units as the proposed Project, most of these units would either be medium/high density attached residential units or very low density detached units, with substantially fewer low density detached units included in the community's overall housing mix. Accordingly, Alternative E, would provide an unbalanced range of housing types by reducing the supply of low density single family detached residential units that are typically attractive to middle income families. This result could dissuade both middle income workers (and employers hoping to hire them) from relocating to the Project site. Moreover, Alternative E's lack of balanced housing choice would be inconsistent with General Plan Housing Element Policy 3-1, which seeks to promote mixed income neighborhoods and increase housing choices for all economic segments of the population.

In addition, Alternative E could lead to higher housing cost for those families looking to purchase high density housing in Village Three. As explained in response to Comment ADD-F.13-6, under Alternative E, all of the units planned for Village Nine and approximately 603 units in Village Eight would be accommodated in Village Three's multifamily Medium Density, High Density, and Very High Density designations. According to a recent report prepared by housing experts at the University of California, Berkley (UCB Report), high-rise and even mid-rise (e.g., six story) residential buildings are far more costly to build on a per square foot basis than single family homes – three to five times higher – and are thus infeasible in most California markets.[3405] Even less costly multi-family units such as quadplexes (four units in a two-story building) and stacked flats (one or two units per floor, generally limited to four stories) – are approximately 30 percent more costly than single family homes on a per square foot basis.[3406] Thus, Alternative E would likely result in higher sales prices for Village Three's attached dwelling units.

The UCB Report also indicates that Southern California counties faced a larger negative fiscal impact for compact multi-family residential development than is the case with lower density development.[3407] Thus, Alternative E may result in fiscal losses to the County or otherwise reduce or eliminate the fiscal surplus projected by the Project. Finally, it should be noted that, in adopting the AVAP and its "Rural Preservation Strategy," the County has made a policy choice to maximize development in designated Economic Opportunity Areas (EOAs) so as to generate property tax revenues and developer fees needed to help fund new infrastructure and public facilities needed to serve the AVAP planning area without sacrificing the rural character of the Antelope Valley outside of EOAs, as discussed in Final EIR, response to Comment F.8-20. Alternative E would be inconsistent with this policy

3405 Nathaniel Decker et al., Right Type Right Place: Assessing the Environmental and Economic Impacts of Infill Residential Development through 2030. U.C. Berkeley Terner Center for Housing Innovation and Center for Law, Energy and the Environment (March 2017): http://ternercenter.berkeley.edu/uploads/right_type_right_place.pdf.

3406 *Ibid*.

3407 *Ibid*.

choice, however, by limiting the type and extent of development that could occur in the West EOA.

In summary, although Alternative E would reduce some of the Project's significant and unavoidable environmental effects, it would not reduce any such effects to less-than significant levels. Moreover, it would (i) not provide a secondary evacuation route across the California Aqueduct, (ii) increase maintenance costs of certain categories of public infrastructure, such as parks, (iii) provide an unbalanced mix of housing options, (iv) increase housing costs for multifamily residential units, (v) have a negative fiscal impact on the County, and (vi) be inconsistent with certain County housing and planning policies. Please also see responses to Comments ADD-F.13-2 through ADD-F.13-8 for a more in-depth discussion of Alternative E.

With regard to the Commenter's suggestion that all grazing must be ceased, this suggestion was heard by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. However, the County disagrees, and notes that grazing is appropriately an allowed used in the Open Space Preserve Mitigation Lands and occurs throughout the Tejon Ranch conserved lands as an integral component of the Ranch-wide Management Plan. As also noted on Draft EIR pages 5.7-11, -45-, -159 and in Final EIR, response to Comment F.8-110, grazing has occurred at Tejon Ranch since it was initially established in 1843 and has shaped the ecological values present on the site today. For example, grazing has helped manage non-native grasses, and allowed persistence of native grasses and forbs. Grazing also reduces wildfire risks by reducing fuel loads. Grazing practices on Tejon Ranch lands used as mitigation for wildlife agency permits are also subject to review and approval by those agencies, and managed grazing has been a required component of such permits. Management grazing practices are designed to protect and preserve existing natural resource values, and can vary based on the nature of the resource being protected or enhanced. For example, some areas of habitat restoration, such as enhancing riparian vegetation or oak woodlands, generally require temporary grazing exclusion until new vegetation becomes more mature. For all of the above reasons, the Commenter's suggestion is unnecessary to reduce Project-related impacts and would be inappropriate for ongoing open space management.

Response to Comment ADD-F.19-24:

The Commenter's concern with regard to the adequacy of water supply for the Project and impacts on existing water users in the area in the event of a drought, is noted, has been provided to the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. However, the EIR analysis demonstrates reliable and sustainable water supplies, including with regard to water from the State Water Project. After thorough analysis, the EIR appropriately concludes that Project water supplies will sustainably meet buildout potable and recycled water demands and would in fact maintain an average annual reserve supply in the two Project water banking facilities of more than 79,000 acre-feet after buildout has been achieved. This surplus would persist over time based on an 82-year hydrologic period of record, including single-dry and multiple-dry years, and taking account of climate change impacts. With regard to the reliability of

imported water supplies for the Project, the potential delivery reliability and variability of Project State Water Project supplies is discussed in Draft EIR Section 5.18, Water Resources, pages 5.18-20 to -28, and -54 to -64. The analysis of Project imported water supplies uses the Early Long Term scenario also used in the California Department of Water Resources' State Water Project Delivery Capability Report, and incorporates the effects of the most severe droughts during the 82-year historical record, plus additional adjustments to account for climate change effects and the 5 percent single-dry year delivery level used by the Antelope Valley-East Kern Water in the Agency's 2015 Urban Water Management Plan. Consequently, the Draft EIR includes a discussion of State Water Project delivery reliability that is consistent with the conservative Early Long Term scenario developed in the Delivery Capability Report and the same scenario, with a reduced single dry year reliability level, used in the Antelope Valley-East Kern Water Agency's 2015 Urban Water Management Plan. The Commenter provides no evidence to dispute EIR analysis, and no further response is required.

The Commenter is correct that a series of wells for water banking, monitoring and potential groundwater extraction would be installed and maintained within the Project and on adjacent land owned by Tejon Ranch Company. With regard to groundwater pumping specifically, such use is strictly managed and controlled pursuant to Antelope Valley Basin Adjudication Judgment and Physical Solution ("Adjudication"). (Draft EIR, Appendix 5.18-D) The Adjudication was approved to sustainably manage Antelope Valley groundwater resources over time. Groundwater use consistent with the Adjudication takes account of and avoids long-term, cumulative impacts to the Antelope Valley Basin. Per Section 1.5 of the Adjudication, the basin's safe yield is 110,000 acre-feet per year. Per Section 3.5.43 of the Adjudication, safe yield is the amount of annual extractions of water from the basin over time equal to the amount of water needed to recharge the groundwater aquifer and maintain it in equilibrium, plus any temporary surplus. Per Section 3.4 of the Adjudication, the physical solution governs groundwater, imported water and basin storage space to ensure that the basin supports existing and future reasonable and beneficial uses. Exhibit 4 to the Adjudication allocates overlying production rights in amounts consistent with sustainable yield and provides that, after a seven-year rampdown period applicable to all users, the Tejon Ranch Company has an overlying production right of 1,634 acre feet per year, all of which will be provided to and utilized by the Project. The Project's groundwater use will be limited to this allocation. With regard to groundwater recharge, the Project has been designed to maximize recharge opportunities, with low impact development stormwater management techniques to promote recharge, as required by MM 4-1. (Final EIR, pages 3-6, 3-108) For further discussion of Project groundwater use and the Adjudication, see Final EIR, responses to Comments A.2-8, D.3-1, F.8-219, and J.1-10.

Response to Comment ADD-F.19-25:

The Commenter's concerns about local air quality are noted, were provided to the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. However, the County notes that the EIR thoroughly analyzes Project impacts with regard to particulate matter, Valley Fever, industrial emissions, and fugitive dust, and mitigates impacts with feasible mitigation measures.

Under existing pre-Project conditions, the SCAQMD is in federal and state nonattainment for particular matter, and the AVAQMD is in state nonattainment for PM_{10}. (Draft EIR, pages 5.11-22 to -28) As discussed in Section 5.11, "Particulate matter in the AVAQMD tends to be primarily fugitive dust. This dust appears to be generated by both local sources and by region-wide dust during moderate to high wind episodes. These regional episodes tend to be multidistrict and sometimes interstate in scope. The AVAQMD has identified the local sources of fugitive dust to be primarily unpaved road travel; construction and local disturbed areas of soil concentrated in the urban populated areas in the district; and seasonal agricultural operations"; and "Particulate levels in the area are due to natural sources (such as wind), grading operations, and motor vehicles". (Draft EIR, pages 5.11-6, -26) Under Threshold 11.2 – Would the proposed project expose sensitive receptors to substantial pollutant concentrations (which includes particular matter), a health risk analysis was completed to evaluate the human health impacts, and concludes that risks at future Project residences and other sensitive areas are below applicable thresholds. (Draft EIR, page 5.11-71 to -72) Further, mitigation measures MM 11-10 and 11-11 have been incorporated to minimize any Project-related impacts. Impacts would therefore be less than significant. (Draft EIR, page 5.11-72) For more in-depth discussion with regard to particulate matter and Project-related impacts, please see Final EIR, response to Comment F.8-189, F.8-196.

With regard to Valley Fever, the EIR appropriately analyzes and discloses Project impacts related to Valley Fever, including with regard to the condition, potential for Valley Fever spores to be found in soils in the Antelope Valley, the effects of contracting Valley Fever, and risks from possible exposure to both construction workers and Project residents. See Draft EIR, Section 5.3, Hazards and Fire Safety, pages 5.3-13 to -14 and -17 to-19, Section 5.11, Air Resources, pages 5.11-28 and -29, and -64 through -67; Final EIR, responses to Comment F.3-29 through F.3-32, F.3A-5, F.3A-38 through F.3A-45, F.3A-68, F.3A-69, and G.13-1. Implementation of fugitive dust control measures required by AVAQMD and SCAQMD and MMs 3-2 and 3-3 would mitigate impacts related to Valley Fever to be less than significant.

With regard to fugitive dust from construction activities, all such potential fugitive dust has been included in Project emissions calculations, air quality analysis, and identification of appropriate mitigation, as discussed in Final EIR, response to Comment F.8-195. The Project Applicant/Developer is required to implement dust control measures as prescribed in AVAQMD Rule 403, Fugitive Dust, and SCAQMD Rule 403, Fugitive Dust. AVAQMD Rule 403 and SCAQMD Rule 403 require that fugitive dust be controlled with best available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. Further, MM 3-11 requires the Project Applicant/Developer to be responsible for creating and regularly updating a website on the proposed Project internet that provides public information regarding dust-generating activities and Valley Fever risk, throughout the Project construction period. The Project Applicant/Developer must also send a one-time notice to surrounding communities and schools of the website's existence and contents. Per MM 3-1, the Project Applicant/Developer "shall employ a Dust-Control Supervisor who will be on the site within 30 minutes of the start of work taking place each morning; will have the authority to expeditiously employ sufficient dust mitigation measures to ensure compliance with all

AVAQMD Rule 403 and SCAQMD Rule 403 requirements; and will have completed the SCAQMD Fugitive Dust Control Class and has been issued a valid Certificate of Completion for the class. Contact information for the Project's Dust Control Supervisor shall be posted on-site to ensure that the public has a means of providing complaints regarding fugitive dust. The Dust Control Supervisor shall be responsible for tracking complaints, conducting corrective action, as necessary, and for maintaining an up-to-date log of complaints and responses for periodic County review. (Draft EIR, page 5.3-26) The Commenter provides no evidence to support the assertion that the above-described requirements would be insufficient to reduce impacts to a less than significant level, and no further response is required.

The Commenter's disagreement with the theory and effectiveness of Smart Growth design is noted, but the County disagrees. The Project has been situated and designed to promote regional Smart Growth planning principles established by the Southern California Association of Governments' (SCAG) 2016-2040 Regional Transportation Plan/ Sustainable Communities Strategy and the County's Antelope Valley Area Plan for the purpose of sustainably accommodating regional growth projections in a manner that reduces criteria pollutant and greenhouse gas (GHG) emissions and to promote public health. For a more detailed discussion, please see Final EIR, response to Comment F.8-20. Please note that the South SCAQMD reviewed the Centennial EIR and determined that the Project's Centennial Specific Plan "exemplifies [the County's] leadership in promoting sustainable communities development" and "will help reduce emissions from mobile sources, protect the public health from air pollution, and achieve healthful air in the [South Coast Air] Basin" (see Final EIR, Volume 1, Comment D.4-2).

Response to Comment ADD-F.19-26:

This comment summarizes many of the points the Commenter makes elsewhere in their letter. With regard to public access to Tejon Ranch lands and scientific study on Tejon Ranch and the Project site, please see response to Comment ADD-F.19-19. With regard to open space management and permitted uses, please see response to Comment ADD-F.19-22. With regard to Alternative E, please see response to Comment ADD-F.19-23. With regard to groundwater usage and impacts, please see response to Comment ADD-F.19-24. With regard to air quality and climate change impacts, Project design, and Smart Growth, please see response to Comment ADD-F.19-25 and Final EIR, responses to Comments F.8-20, F.8-204. With regard to Project site weather conditions, that is a characteristic of the existing environment that is common to the planning area and is not expected to be exacerbated by the Project in any meaningful way

Response to Comment ADD-F.19-27:

The comment correctly states that a portion of the Project, in its previous design prior to 2008, was subject to Significant Ecological Areas Technical Advisory Committee (SEATAC) review. Prior to 2008, the Project was designed to overlap with a portion of SEA 17 (previously SEAs 58 and 59), which would have resulted in impacts to the SEA. The prior design is described in the 2004 Notice of Preparation, included in Draft EIR Appendix 2.0-B.

However, the Project design was subsequently changed and considerably reduced in size, and is currently designed to avoid all direct impacts on SEA 17. As a result, SEATAC no longer has jurisdiction to comment on the Project. Implementation of Draft EIR PDF 7-1, dedication of a Mitigation Preserve, sets aside thousands of acres within SEA 17 and as such these areas shall be preserved and managed in perpetuity. (Draft EIR, pages 5.7-135 to -137, revised Exhibit 5.7-10) For further discussion of SEATAC, the SEA program, and its relationship to the Project, please see Draft EIR, pages 4-29 to -30, and Final EIR, responses to Comments B.4-48, F.7-19. With regard to the Commenter's assertion that Project mitigation efforts must be monitored and enforced to ensure appropriate implementation, this is already a Project requirement, as reflected in the Mitigation Monitoring and Reporting Program.

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CITIZENS FOR LOS ANGELES WILDLIFE
CLAW
PO Box 50003 Studio City, CA 91614
805-225-5766 info@clawonline.org www.clawonline.org

ADD-F.20

August 28, 2018

Via Electronic Mail

Regional Planning Commission
Los Angeles County
320 W. Temple Street
Los Angeles, California 90012

RE: Opposition to Centennial Sprawl Project No. 02-232-(5)

Dear Planning Commissioners:

Citizens for Los Angeles Wildlife (CLAW) is a non-profit environmental organization concerned with the well-being of wildlife and wildlife habitat for Los Angeles and beyond. A citizenry of more than 3000 individuals supports our organization's multiple calls for biodiverse practices and policy to benefit LA City, County, California and the globe. Our organization joins thousands of LA County residents and organizations opposed to the current up-zone plan for Centennial. ADD-F.20-1

You are by now well aware that the sight is home to endangered fauna and rare flora and that the proposed Centennial project's sprawl-style development will server habitat linkages and block wildlife movement. Please help protect our biodiversity and prioritize this unique regional ecosystem. The power to NOT up-zone thousands of acres of iconic and pristine land lies in your hands. ADD-F.20-2

Sincerely,

Tony Tucci,
Chair, Citizens for Los Angeles Wildlife

CLAW is a public benefit non-profit 501(c)(3) environmental organization that works to protect and restore the environments of wildlife of Los Angeles and California from dwindling open spaces. Our mission is to promote, educate and protect the fundamental importance of wildlife, wildlife habitats and wildlife corridors everywhere.

Response to Comment Letter ADD-F.20
Citizens for Los Angeles Wildlife
August 28, 2018

Response to Comment ADD-F.20-1:

Thank you for your participation in this public process. These comments were provided to the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. The Commenter's opposition to the Project is noted. With respect to the Commenter's assertion that the Project is "upzoning," the County notes that the Project has been designed consistent with requirements of the AVAP, which the County approved in 2015 and which concentrates development in Economic Opportunity Areas (EOAs) including the Project site, which is the Western EOA. This comment does not address the adequacy of the EIR, and no further response is required.

Response to Comment ADD-F.20-2:

With regard to the Commenter's assertion that the Project constitutes sprawl, please see Final EIR, response to Comment F.8-20. With regard to Project impacts on special-status wildlife and plant species, the EIR thoroughly analyzes impacts and incorporates enforceable, feasible mitigation measures. With regard to habitat linkages and wildlife movement, the EIR appropriately analyzes both, and the Project design and mitigation would ensure less than significant impacts. In the wildlife movement assessment, connectivity between the Tehachapi Mountains and the San Gabriel Mountains was considered in detail (Draft EIR, pages 5.7-50 to -64, -164 to -170). The thorough assessment concluded that although maintaining baseline connectivity between the two regions is essential, development of the Project would not significantly impact movement between these regions (Id., page 5.7-166). The wildlife movement impact analysis beginning on page Draft EIR page 5.7-164 does conclude that development of the Project site will result in some losses of areas that may be used for foraging and/or breeding for species; pathways to or from foraging or breeding grounds on the Project site, such as along ridge-lines or canyon bottoms, may become "dead ends" to through dispersal. However, these losses are not expected to significantly impact wildlife movement, and sufficient habitat connectivity would be retained in the region for these species, especially given the substantial amount of similar terrain in the northwestern Antelope Valley area. Further, two regional conservation plans, the Tejon Ranch Conservation and Land Use Agreement and the TUMSHCP, although not providing mitigation for Centennial, would act in concert with the Centennial mitigation preserves to help sustain the functionality of the regional landscape linkage for future wildlife populations. Multi-generational gene flow (a series of connected wildlife movement events over time, allowing for genes to pass within and between populations) among wildlife populations in the region is expected to be sustained in the open spaces on and off the site that will remain following Project implementation. These open spaces provide sufficient habitat connectivity to allow for such gene flow. Implementation of MM 7-14, which designates a SR-138 wildlife underpass (along with a 50-foot open space buffer) where the current intersection with National Cement Plant Road exists, will also allow for local wildlife

movement to pass through the Project area down to SEA 17. The direct impacts of Project development on wildlife movement, therefore, are considered less than significant after mitigation for local wildlife movement impacts. Nonetheless, the Draft EIR (page 7-17) discloses that the Project when combined with other projects in the region would result in a cumulatively significant impact on wildlife movement. Lastly, the Project design is consistent with the Antelope Valley Area Plan (AVAP) including with regard to open space designations, SEA protection, and preservation of habitat linkages. For further discussion of wildlife movement and habitat connectivity, please see Final EIR responses to Comments B.2-3, B.4-34 to B.4-37, B.4-56, B.4-57, B.4-75, F.3-23 to F.3-25, F.3A-32 to F.3A-34, F.5-2, F.7-22, F.8-109, F.8-110, and F.8-165 through F.8-169.

SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL® Company

Ronald O. Nichols
President

October 1, 2018

Gregory R. Bielli, President & CEO
Tejon Ranch Company
4436 Lebec Road
Tejon Ranch, CA 93243

Dear Greg,

As a follow up on our conversation regarding Tejon Ranch's Centennial project, I am writing to commend you on this state-of-the-art development.

As you know, SCE is committed to supporting California's clean energy goals. Our Clean Power and Electrification Pathway proposal aims to clean the power grid, build out the infrastructure for electric transportation, and electrify buildings and homes. SCE cannot achieve these goals alone and collaborations with like-minded partners such as Tejon Ranch are essential to creating a clean energy future.

The Centennial green master-planned community is a forward thinking project. It integrates significant onsite renewable energy, electric vehicle, and energy efficient home design features. It is estimated that more than half of the project's total electricity demand will be met with onsite renewable energy generation. This is truly a praiseworthy proposal as it will represent one of the highest percentages of onsite generation committed to by a planned community in our service territory to date.

The plan to install electric vehicle home charging outlets in single family residences, as well as charge stations throughout the community, is a key design element for a carbon-free future. It is also in alignment with SCE's Charge Ready program which seeks to reduce greenhouse gas emissions and air pollution by expanding electric vehicle charging at home, work and public places.

The project has also committed to exceed the current California Building Energy Efficiency Standards and meet the voluntary 2016 CALGreen Tier 1 standards for residential buildings and nonresidential building, further demonstrating Centennial's commitment to energy efficiency and sustainability.

Tejon Ranch is leading the way for future sustainable developments and as the electric transmission and distribution provider for the project, SCE looks forward to doing our part to make Centennial a success.

Please reach out directly to me or my staff if you need any assistance as you move forward with this project.

ADD-F.21-1

Best regards,

Ronald O. Nichols
President
Southern California Edison

cc: Jodie Sackett, Department of Regional Planning
Supervisor Kathryn Barger, Fifth Supervisorial District

8631 Rush Street
Rosemead, CA 91770
626-302-2429

Response to Comment Letter ADD-F.21
Southern California Edison
October 1, 2018

Response to Comment ADD-F.21-1:

Thank you for your participation in this public process. The Commenters' support for the Project's energy and sustainability features is noted, was provided to the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. This comment does not specifically address the adequacy of the EIR, and no further response is required.

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G. Individuals

CENTENNIAL

at TEJON RANCH

Dear Mr. Sacket:

I'm writing in support of Centennial at Tejon Ranch. The County of Los Angeles is facing a housing crisis and we need a variety of housing types in various locations throughout Los Angeles County. Centennial's master-plan will do just that; create more price-attainable housing and it will help accommodate the planned regional population and economic growth in our county.

As you know, Centennial is consistent with the Antelope Valley Area Plan (AVAP), offering a wide array of housing, business park/office space, commercial, schools, parks, natural open space, cultural, and public uses.

The community masterplan is simply the implementation of the AVAP, a balanced plan of economic opportunity and conservation. Centennial has also been at the table with the Golden State Gateway Coalition in regards to fast tracking the I-5 improvements before this new community has been set.

It is important to define the project location in terms of synergy with the growing populations near the Centennial project. There is great synergy between other Tejon Ranch projects in Kern County, including Grapevine and Tejon Mountain Village, as well as the Antelope Valley and Santa Clarita.

ADD-G.64-1

Centennial is LA County's opportunity to take advantage of growth at Tejon Ranch in Kern County by increasing tax revenue for the general fund and providing increased public services to North LA County, but also providing diverse working-class and middle-income families an opportunity for homeownership.

In addition, Centennial includes plans to focus on water conservation through the use of recycled water and several other sustainable sources. The project's Green Development program requires reduced potable water consumption through the use of drought-tolerant plants, low-flow showerheads, faucets, and toilets. The Centennial master plan will also use recycled water for landscape irrigation in residential common areas.

I urge the Regional Planning Commission to approve and allow Centennial to move forward. We need to finally begin development on this much-needed community.

Response to Comment Letter ADD-G.64
Form Letter 11
Various Dates

Response to Comment ADD-G.64-1:

A form letter was prepared by an unknown source and was made available to the public for submittal to the County via email. These form letters appear as Appendix A-11 to this document. The Commenters' support for the Project is noted, was provided to the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. This form letter does not specifically address the adequacy of the EIR and no further response is required.

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Dear Jodie Sackett,

Centennial is a terrible deal for L.A. County. Centennial would be located in a "high" and "very high" fire hazard area subject to intense winds. Locating thousands of people in this fire-prone area will certainly lead to more human-caused wildfires, scorched homes and loss of life. The immense costs of protecting residents in this remote area from inevitable wildfires would be borne by Californians in and beyond Los Angeles County.

Centennial will not help address the county's housing shortage. Building a new city 65 miles from downtown LA will not help residents live near their jobs. Instead, Centennial would require construction of a new freeway at an initial cost of $830 million, which would divert scarce funds away from transit projects that make our existing communities more livable and sustainable.

Centennial would add tens of thousands of new cars each day onto Highway 5, leading to further gridlock in Santa Clarita and the San Fernando Valley. Thousands of long-distance car trips will lead to more cancer- and asthma-causing air pollution, as well as associated public health and treatment costs.

Your decision on Centennial is perhaps the most far-reaching decision you will ever make as a county official. Please, don't approve Centennial. It would reward Wall Street speculators while leaving county residents stuck with more freeway maintenance and fire-prevention costs, more traffic, and more air pollution.

ADD-G.65-1

Response to Comment Letter ADD-G.65
Form Letter 12
Various Dates

Response to Comment ADD-G.65-1:

A form letter was prepared by an unknown source and was made available to the public for submittal to the County via email. These form letters appear as Appendix A-12 to this document. This comment's stated opposition to the Project is noted, was provided to the Regional Planning Commission, and will be provided to the Board of Supervisors for their consideration. With regard to the topics raised in this letter, please see Draft EIR Section 5.3, Hazards and Fire Safety, Section 5.9, Population, Housing, and Employment, Section 5.10, Traffic, Access and Circulation, and Section 5.11, Air Resources. Since this comment does not raise any specific concerns regarding the adequacy of the EIR, no further response is required.

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Dear Jodie Sackett,

Scientists warn that we're in the middle of a climate crisis. Because transportation is the single largest driver of carbon pollution in California, new development located far from existing cities has disproportionately large climate impacts. Centennial exemplifies poor, outdated land-use planning on an unprecedented scale. This isolated new city would lock in at least 75,000 new vehicle trips per day with an average trip length of over 45 miles.

If you're committed to a sustainable future for L.A., then you need to say no to Centennial.

L.A.'s wildlands are rapidly diminishing. Ninety-nine percent of California's native grasslands are already gone forever, paved over by similar sprawl development. The Centennial project site contains the last, largest and best native grassland and wildflower fields left in California. Rare wildlife such as California condors, bald eagles, kit foxes and pronghorn also will be harmed if Centennial is built.

It's your job to protect our communities and natural resources, not sell them out to developers.

L.A. County should be setting the standard for 21st-century planning by supporting transit-friendly, urban, affordable housing. Centennial is a poster child of 20th-century sprawl development that exacerbates threats to our population through increasing greenhouse gas production and climate change, air pollution and a deteriorating quality of life.

ADD-G.66-1

The proposed site is in "high" and "very high" fire hazard severity zones. And it's directly on top of California's two major earthquake faults. The area was rated by the U.S. Geological Survey as having the highest level of earthquake hazard.

The county and its taxpayers will be on the hook for millions to provide basic public and emergency services to this remote area.

Instead of allowing isolated sprawl development on irreplaceable grasslands in an area at extremely high risk for fires and earthquakes, L.A. should focus on creating safe housing and economic opportunities in or near existing cities.

Please say no to Centennial: It's the wrong vision for L.A.

Sincerely,

Response to Comment Letter ADD-G.66
Form Letter 13
Various Dates

Response to Comment ADD-G.66-1:

A form letter was prepared by an unknown source and was made available to the public for submittal to the County via email. These form letters appear as Appendix A-13 to this document. This comment's stated opposition to the Project is noted, was provided to the Regional Planning Commission, and will be provided to the Board of Supervisors for their consideration. With regard to the topics raised in this letter, please see Draft EIR Section 5.3, Hazards and Fire Safety, Section 5.7, Biological Resources, Section 5.8, Land Use, Section 5.10, Traffic, Access, and Circulation, Section 5.11, Air Resources, and Section 5.21, Climate Change, and Final EIR, responses to Comments A.3-3, A.3-4, A.3-5, A.3-7, B.4-20, B.4-21, B.4-22, B.4-23, F.2-2, F.2-5, F.3-29, F.3A-46, F.8-20, F.8- 95, F.8-128 to F.8-131, F.8-189, F.8-204, G.31-1, H.21-1, and J.1-6. Since this comment does not raise any specific concerns regarding the adequacy of the EIR, no further response is required.

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From: Andrea Bell, L.C.S.W.
To: Jade Sackett
Subject: Fwd: Centennial development
Date: Wednesday, August 22, 2018 3:29:15 PM

Greetings,
I would like to request that Mr Sackett please deliver my comment (in the email attached below) to the Regional Planning Commission.

Thank you, and best regards,
Andrea Bell
Long Beach, CA

Sent from my iPhone

Begin forwarded message:

From: "Andrea Bell, L.C.S.W." <andreab.lcsw@gmail.com>
Date: August 21, 2018 at 6:37:03 PM PDT
To: "fourthdistrict@bos.lacounty.gov" <fourthdistrict@bos.lacounty.gov>
Subject: Centennial development

Dear Ms. Hahn,

As a certified California Naturalist (through the University of CA) and an ecotherapist, I am writing to you to implore you to please oppose the Centennial development.

This project is proposed for a critically imperiled habitat that is home to rare plants, wildlife, and the Antelope Valley's last herd of pronghorn antelope.

In my opinion, what we humans seem to be missing is that we are all dependent on the web of life. If we kill it, then eventually, we die too. As a naturalist, I know that land use change is one of THE most under-rated and devastating threats to our wildlife and sustainability. When we take away the habitat for plants and animals, they have nowhere to go and they die.

Our beautiful state of California is a jewel. It is known worldwide as a biodiversity hotspot—but we are relentlessly extinguishing that. We can't continue to cram unlimited numbers of people here; our ecosystems simply won't support it. When does it end?

Please oppose this new development on this threatened land.

Sincerely,

ADD-G.67-1

Andrea L. Bell, LCSW, SEP
California Naturalist
(562)243-9963
--
Andrea L. Bell, LCSW, SEP
Licensed Clinical Social Worker, Somatic Experiencing Practitioner
512 Redondo Avenue, Suite A
Long Beach, CA 90814
(562)243-9963
http://secure-web.cisco.com/1IpktdkBN6WZ9cWELqgtildwFjB9M6n8jmQyde57hlwrdMFzKQhWh3baJKb2Mf9LokkPILdRXH_fNopwiFZbIPTqtztClQdgSN6BxjWWPVkJKiVgp677h6tDLAFyqkHFHMp7dSQch2k4CuvPmiN6G869aFfSjm4her7mnUyVNyp-kw3WKy8z6SxlGyuaINod_feg80mVHO8ZRTr_TdOimr9tkw1D3aabT5mix6LvqgDLBnqGtxVmJ0RcRRyPI7F8KdDRoA3I4rKFjZuwMnjf0kng-a4y8UfVj38Xv4upJw9q3cJmV9yRb4LRWEmeJyIxIeDefkoFFppWHdY1UAFBYsmKB2xJBCp4ZO1CjQNGdA_43eFB4T26D3bwL09xs8AWEMi-fSh3xDHKPra8OIj31w/http%3A%2F%2Fwww.somaticwise.net

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Response to Comment Letter ADD-G.67
Andrea L. Bell, LCSW, SEP
August 22, 2018

Response to Comment ADD-G.67-1:

Thank you for your participation in this public process. The Commenter's opposition to the Project is noted, this comment was provided to the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. The EIR thoroughly analyzes Project impacts on wildlife, plants, and habitat, and identifies feasible mitigation measures to reduce such impacts. Please see Draft EIR, Section 5.7, Biological Resources, Final EIR responses to comments on biological resource impacts, and the Mitigation Monitoring and Reporting Program for more information on these topics. This comment does not specifically address the adequacy of the EIR and no further response is required.

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From: Jacquelyn R Chase
To: Jodie Sackett; DRP LDCC
Subject: Recent email with attachments
Date: Wednesday, August 22, 2018 10:31:29 PM
Attachments: Reilly Free riders cost of wildfire mgmt.pdf

Dear Mr. Sackett,

I'm sorry to bother you with this but I recently attempted to send you a follow up email with copies of the referenced works in my earlier letter of today, but Outlook said the email was too large. However, it appears it may have gone through after all. I was asking in that email that you include the attachments with the letter in case the commissioners wish to review any of the sources.

Could you confirm that you received an email from me with several PDFs attached? There should be 8 or 9 attachments.

If so, please make sure the one attached here is included. I had removed it so as to reduce the MB in the message.

ADD-G.68-1

Thank you.

Jacquelyn Chase

Response to Comment Letter ADD-G.68
Jacquelyn Chase
August 22, 2018

Response to Comment ADD-G.68-1:

Thank you for your participation in this public process. The attachment transmitted by Commenter was provided to the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. This comment does not address the EIR, and no further response is required. For responses to the separate letter that Commenter references in this email, which letter is dated August 22, 2018, the letter has been labeled ADD-G.69. Please see Responses to Comments ADD-G.69-1 through ADD-G.69-6.

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August 22, 2018

Mr. Jodie Sackett, Senior Planner
County of Los Angeles Department of Regional Planning
Hall of Records, 13th Floor, Room 1348
320 West Temple Street
Los Angeles, CA 90012
jsackett@planning.lacounty.gov

Re: Centennial

Dear Mr. Sackett,

I wish to comment on some of the assumptions the Centennial plan makes about mitigating for wildfire. The fire research community and fire responders are increasingly skeptical of prescriptions to "fire safe" the landscape. Fire behavior is changing across the state's wildland-urban interface areas (WUIs). Fires are getting bigger, faster, more erratic and more destructive (Strader 2018). Ember ignitions challenge reliance on defensible space. Fires keep breaking records in California. Of 20 largest fires since 1932, 14 have been since 2000, and six since 2012 (Pope 2018).The cost of fire in the WUI is being externalized to all of us as fire agencies are called to fight fires at the cost of billions of dollars each year (Reilly 2015). As a resident of California, a county planning commissioner in a fire-prone region, and member of the Northern Sacramento Valley Chapter of the California Association of American Planners, I believe I have a stake in opposing this development. ADD-G.69-1

The plan states that the area for the project encompasses land classified by Cal Fire as high or very high fire severity zone. The surrounding vegetation is known to be combustible, and the dry, hot and windy conditions at the site will continue to produce wildfires. Much of the terrain is steep, which accelerates fire and aggravates its containment. There have been 31 wildfires of over 100 acres on or near the site between 1964 and 2015. The plan calls for medium and low density development, similar to WUI neighborhoods such as Keswick Estates (Redding), The Trails (Rancho Bernardo—San Diego) and Coffey Park (Santa Rosa)—all which were destroyed in wildfires in the last decade.

I am not saying that because those developments burned that Centennial will suffer the same fate, or that these measures should be abandoned in existing WUIs. I'm saying that despite them, quasi-suburban places, with ample hardscapes and irrigated, non-flammable vegetation, have suffered huge losses during WUI fires. One-third of the homes that burned in the Trails subdivision in San Diego were "hardened" (Maraghides and Mell 2011). Burned-out residents (and most of us who read about their plight) are shocked to learn that such a mix of cement, lawns, pools, and paved roads would ignite as they have in San Diego, Redding, Santa Rosa, Santa Barbara, and so on. The Centennial project is essentially leapfrog development, as it will be surrounded on all sides by undeveloped land. This makes it the most vulnerable of any kind of WUI (Syphard et al. 2013). ADD-G.69-2

The plan makes only a vague distinction between the needs for fighting structural (urban) fires and wildland fires. The plan says it will locate four fire stations in the development, which would create a ADD-G.69-3

response time of no more than five minutes to any place on the site. That is fine as far as responding to individual fires starting within town goes, but it hardly addresses the scenario of a wildfire that comes into Centennial from the outside, or that is started by people from within the development (or commuting to and from home, or recreating in surrounding areas) and spreads to adjacent wildland vegetation.

ADD-G.69-3 (cont'd)

Dealing with conflagrations involves many agencies which must be reimbursed. Fires in California this year got help from as far away as Australia and New Zealand. If the state requires classification of land by fire risk, as noted above, under what circumstances can you justify moving tens of thousands of people (and their life's savings) into harm's way and assuming that other agencies will come to the rescue when state or county resources are already scarce or unavailable during wildfire season (Reilly 2015)?

ADD-G.69-4

The Centennial plan says the developers will mitigate with vegetation clearance and building standards. Management practices give a false sense of safety and lead to more development in places that are at high risk for fire (Butsic, Kelly and Moritz 2015). The reliance on vegetation management to create defensible space is wishful thinking. Fire researchers are unconvinced that such "Firewise" landscapes are enough to defend communities from the generation of wildfires that the state is experiencing. Fire breaks help but embers caused 2/3 of the destruction of homes by the Witch and Guejito fires in San Diego's Trails neighborhood in 2007 (Maranghides and Mell 2011). An unknown number of homes were burned by neighboring ignitions in these suburbs Gonzalez-Mathiesen and March 2018). The Centennial plan promises to remove untold acres of native vegetation to improve the chances of the community to survive a wildfire, without solid research to back this assumption up. In the process, such clearing will destroy habitat for native species. County planning cannot ignore biodiversity, agriculture, and conservation all in the name of hazard mitigation (Mann et al. 2014)—especially when the evidence for success is missing.

Firefighting units are increasingly skeptical about putting their personnel at risk during WUI wildfires to defend property when they perceive that the owners have not done enough to create defensible space or have done so incorrectly (McNeal 2011). WUI communities are notorious for inconsistent compliance with the arduous and expensive process of keeping properties cleared.

Prevention through landscape engineering will not work. The defensible space solution touted by this project shows that it is out of touch with the reality of wildfire in California and with countless studies that propose different solutions. The emerging consensus is to think of wildfire areas much like we see floodplains as "no go" zones.

ADD-G.69-5

I know your general plan supports this new town vision for the Antelope Valley, but everything we know about wildfire has changed since its writing. Fires keep breaking records in size, deaths, and numbers of structures destroyed, and the consensus is that we should steer growth away from the WUI. Millions of Californians already live in rural acreage that will subdivide and densify, but this process has been more gradual and the resulting footprint is known to be (relatively) more resilient to fire than WUI suburbs. The opposite can be expected from suburban growth in fire-prone areas. These develop quickly, they are the most vulnerable to fire, and their growth drives the catastrophic human toll of fire today.

ADD-G.69-6

Sincerely,

Response to Comment Letter ADD-G.69
Jacquelyn Chase
August 22, 2018

Response to Comment ADD-G.69-1:

The Commenter's opposition to the Project, and information on fire behavior and firefighting, were provided to the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. The EIR thoroughly and appropriately analyzes the Project's fire-related impacts, including with regard to the wildland-urban interface. The Draft EIR concluded that Project impacts related to fire safety would be less than significant only after taking into consideration (i) Project site access, (ii) Project site water flows, (iii) Project site topography, (iv) Project site vegetative cover, (v) existing and proposed regulatory controls, (vi) existing mutual aid agreements between federal, state, and local fire safety service providers, and (vii) Project improvements and mitigation measures related to landscaping and vegetation management, building construction, circulation, public utilities, and fire protection services, including but not limited to MM 3-9. Additionally, as required by MMs 16-1 through 16-3, the Project will provide within the Project site up to four new fire stations staffed by a minimum four-person engine company. In Village 1, one fire station is proposed east of the National Cement Plant Road. The second fire station is proposed in Village 4, and the third fire station is proposed in Village 7, with the location of a potential fourth station to be determined. These new fire stations are projected to provide an average five-minute response time for the first arriving unit for fire and eight minutes for the advanced life support (paramedic) unit on the site at Project buildout. This is consistent with the County of Los Angeles Fire Department's (LACFD's) goals for response times in urban areas. Ultimately, the LACFD would approve the final station site locations, and the Applicant would construct and equip the fire stations (MM 16-3). The LACFD has indicated that the proposed fire stations on the site would provide adequate fire service to the Project.

With regard to the changing nature of wildfires, the County notes that years of experience by expert fire agencies and others have led to the state statutory strategy followed for the Project and described further in response to Comment ADD-G.69-5. Further, as the Project is built out over 20 years, it is likely that the Fire Codes, standards, and guidelines would be continually updated by the State and County agencies as the knowledge gained from past fires is increased; these updated code requirements, as finalized through discussions with the LACFD, would be applied to subsequent development phases of the Project to ensure that Project development continues to meet evolving standards to ensure impacts are less than significant. (Draft EIR, page 5.3-37) Compliance with State and County regulations that apply to the proposed Project is required. With adherence to the required and best-accepted practices for fuel-modification zone management, emergency access, building materials and methods, as well as the changes in land use, and existing mutual aid agreements, the Project's potential to constitute a dangerous fire hazard, or to expose people or structures to a significant risk of loss, injury or death involving fires, would be reduced to a less than significant level. For further discussion, please see Draft EIR Sections 5.3 Hazards and Fire

Safety and 5.16 Fire and Law Enforcement, responses to Comments ADD-G.69-2 through ADD-G.69-6 and ADD-G.70-1, and Final EIR response to Comment A.2-6.

Response to Comment ADD-G.69-2:

As noted by the Commenter and disclosed in the Draft EIR and Final EIR Exhibit 5.3-2, the western and southeastern edges and eastern portions of the Project site are designated by the California Department of Forestry and Fire Protection (CAL FIRE) as a Very High Fire Hazard Severity Zone (VHFHSZ), the western and central portions are designated as a High Fire Hazard Security Zone (HFHSZ), and the eastern edge is designated as a Moderate Fire Hazard Severity Zone (MFHSZ), and the potential for wildland fire hazards would exist at the wildland/urban interface due to (a) the presence of brush; (b) increased human activity; and (c) the increased potential for fires due to accidental and arson-related causes. (Draft EIR, pages 5.3-35, -36) The EIR acknowledges that existing Project site vegetation is highly combustible, and that the Project site's topography is challenging, both adding to the Project site's designations. (*Id*.) As the Commenter also notes, the EIR explains that a recorded total of 31 wildfires over 100 acres in size within approximately 5 miles of the Project site have occurred from 1964 through 2015, and fire history is a factor in the Project site's current designations. (Draft EIR, pages 5.3-33, -34) The Commenter's comparison of the Project site to other development is noted, but the County notes that Project-specific conditions have been thoroughly evaluated, and appropriate feasible mitigation identified to ensure that Project-specific impacts are mitigated to a less than significant level. With regard to the comment that the Project is designed for only medium and low density, the Commenter mischaracterizes the Project. The Project includes a balance of residential use types, including Very Low Density Residential, Low Density Residential, Medium Density Residential, High Density Residential, and Very High Density Residential. (Draft EIR, pages 4-17 to 4-23)

With regard to the ignition potential of Project building materials, the County notes that a major purpose of designating fire hazard severity zones is to identify the appropriate requirements for building materials. The Project would comply with State law and with all County requirements related to development in a designated VHFHSZ or HFHSV. As discussed in the EIR, due to the Project site's designations, it must comply with the County of Los Angeles' standards in "Materials and Construction Methods for Exterior Wildfire Exposure" of the Building Code (Title 26) and in the Fire Code (Title 32), which include but are not limited to the following requirements:

- All roof coverings shall be of fire retardant Class A materials. Wood-shingle and wood-shake roofs are prohibited in Very High Fire Hazard Severity Zones (VHFHSZs) regardless of classification (Section 704A.1.2).
- Where the roof profile allows a space between the roof covering and roof decking, the spaces shall be constructed to prevent the intrusion of flames and embers; shall be firestopped with approved materials; or shall have one layer of No. 72 American Society of Testing and Materials (ASTM) cap sheet installed over the combustible decking (Section 704A.1.2).

- Ventilation openings shall be constructed on the underside of eaves and cornices. The Building Official may accept or approve special eave and cornice vents that resist the intrusion of flame and burning embers (Section 706A.3 et. seq.).
- Exterior windows, window walls, glazed doors, and glazed openings in exterior doors shall be multi-pane glazing units with a minimum of one tempered pane, or glass block units, or have a fire-resistance rating of not less than 20 minutes, when tested according to ASTM E 2010, or they shall conform to the performance requirements of the Office of the State Fire Marshall (SFM) 12-7A-2 (Section 704A.3.2.2).
- Spark arresters constructed with heavy wire mesh or other noncombustible material with openings not to exceed ½ inch shall be provided in chimneys of any fireplace, barbecue, incinerator, or any heating appliance in which solid or liquid fuel is used (Section 326.12.2).
- Clearance of brush and vegetative growth shall be maintained (Section 325.2). (Draft EIR, pages 5.3-32, -33)

Further, it as the Project is built out over 20 years, the Fire Codes, standards, and guidelines would likely be continually updated by the State and County agencies as the knowledge gained from past fires is increased; these updated code requirements, as finalized through discussions with the LACFD, would be applied to subsequent development phases of the Project to ensure that Project development continues to meet evolving standards to ensure impacts are less than significant. (Draft EIR, page 5.3-37)

With regard to the assertion that the Project constitutes "leapfrog" development, the County disagrees, as is discussed thoroughly in Final EIR, response to Comment F.8-20.

Response to Comment ADD-G.69-3:

The Commenter's assertion that the EIR addresses fire service requirements for on-site structure fires but does not adequately address wildland fire and regional fire potential was considered by the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. However, the County disagrees.

First, the County notes that with regard to a potential off-site fire traveling to the Project site, where the Project does not exacerbate such impact, CEQA does not require an analysis of the environment on the project but rather, per CEQA Section 21065, whether a project "may cause either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment." According to the California Supreme Court in *California Building Industry Association v. Bay Area Air Quality Management District* (2015) (62 Cal.4th 369), "CEQA analysis is concerned with a project's impact on the environment, rather than with the environment's impact on a project and its users or residents." (CBIA v. BAAQMD at 369, 378) However, the EIR fully analyzes the Project's impacts related to fire safety, as explained further in responses to Comment ADD-G.69-6 and ADD-G.70-1, and Final EIR response to Comment A.2-6.

The Project's fire services proposal was developed in consultation with the Los Angeles County Fire Department Project (LACFD), and it has been appropriately evaluated with regard to the ability of the LACFD to provide service to the Project in the event of any type of reasonably foreseeable fire based on Project development and fire hazard designation of the Project site. In addition to the four proposed fire stations to be constructed as part of the Project, additional fire protection services would be provided by the closest available LACFD response units listed in Draft EIR Table 5.16-1. (Draft EIR, page 5.16-7) Further, in the event of a significant fire event such as a wildfire, if within the jurisdiction of the LACFD, the Project would be served by the resources of the LACFD as a whole instead of just the station nearest to the site. (Id.) In the case of a more significant incident requiring additional fire protection resources, as discussed on Draft EIR page 5.16-8, the LACFD participates in a statewide mutual aid system that allows unaffected fire agencies to voluntarily provide aid to other agencies, local governments, operational areas, and the State. The State of California also participates in a nationwide mutual aid system (County of Los Angeles 2012). In addition, the LACFD has automatic mutual aid agreements with the Kern County Fire Department, the Ventura County Fire Department, and the United States Forest Service (USFS), which would allow for these other fire agencies to respond to fire incidents at the site and for the LACFD to respond to fire incidents in Kern County, Ventura County, and the Angeles National Forest (LACFD 2015b).

Response to Comment ADD-G.69-4:

Contrary to the Commenter's assumption, the EIR does not assume that unidentified agencies will "come to the rescue." Rather, it discusses the appropriate measures that LACFD has taken to ensure that it has the ability to deal with reasonably foreseeable fire events through a combination of LACFD services, regional mutual aid, statewide mutual aid, and the state through its participation in national mutual aid, as discussed more thoroughly in response to Comment ADD-G.69-3. With regard to the "classification of land by fire risk," as more thoroughly discussed in response to Comment ADD-G.70-1, designation of fire hazard severity zones is not intended to prevent all development, but rather to help limit wildfire damage to structures through planning, prevention, and mitigation activities/requirements that reduce risk.[3408] The comment provides no evidence to support an assertion that the EIR is inadequate, and no further response is required.

Response to Comment ADD-G.69-5:

The Commenter simplifies the Project's approach to fire safety analysis, asserting that the Project relies only on "vegetation clearance and building standards." While the Draft EIR has determined that, with implementation of MM 3-9 (requiring a Fuel Modification Plan), Project impacts related to fire hazards would be less than significant under both applicable thresholds of significance, the Draft EIR concluded that Project impacts related to fire safety would be less than significant only after taking into consideration (i) Project site access, (ii) Project site water flows, (iii) Project site topography, (iv) Project site vegetative cover,

[3408] CALFIRE, Wildland Hazard and Building Codes Frequently Asked Questions: http://www.fire.ca.gov/fire_prevention/fire_prevention_wildland_faqs

(v) existing and proposed regulatory controls, (vi) existing mutual aid agreements between federal, state, and local fire safety service providers, and (vii) Project improvements and mitigation measures related to landscaping and vegetation management, building construction, circulation, public utilities, and fire protection services, including but not limited to MM 3-9. For further discussion of the EIR's thorough analysis of fire safety risk, please see Draft EIR, Sections 5.3, Hazards and Fire Safety, and 5.16, Fire and Law Enforcement, Final EIR response to Comment A.2-6, and responses to Comments ADD-G.69-1 through ADD-G.69-4 and ADD-G.70-1.

With regard to the Commenter's assertion that "reliance on vegetation management to create defensible space is wishful thinking," which the County reasonably interprets as an assertion that fuel modification is ineffective, the County disagrees. Years of experience by expert fire agencies and others have led to a state statutory strategy for reducing the chance of building loss and damage through a two-pronged approach: 1) defensible space – reduce flammable material around homes to keep direct flames and heat away from the side of the building; 2) exterior wildfire exposure protection – construct buildings so that they have less chance of catching fire from burning embers.[3409] As noted by CALFIRE, the benefits of fuel treatment include preventing loss of lives, reducing fire suppression costs, reducing private property losses and protecting natural resources from devastating wildfire.[3410] Further, as the Project is built out over 20 years, it is likely that the Fire Codes, standards, and guidelines would be continually updated by the State and County agencies as the knowledge gained from past fires is increased; these updated code requirements, as finalized through discussions with the LACFD, would be applied to subsequent development phases of the Project to ensure that Project development continues to meet evolving standards to ensure impacts are less than significant. (Draft EIR, page 5.3-37) Compliance with State and County regulations that apply to the proposed Project is required. With adherence to the required and best-accepted practices for fuel-modification zone management, emergency access, building materials and methods, as well as the changes in land use, and existing mutual aid agreements, the Project's potential to constitute a dangerous fire hazard, or to expose people or structures to a significant risk of loss, injury or death involving fires, would be reduced to a less than significant level.

Response to Comment ADD-G.69-6:

The Commenter notes that the Project site is not urban and therefore has different fire-related impacts. The EIR acknowledges this and evaluates fire risks specific to the Project site and its urban/wildland interface, and specific to its fire hazard designations, as discussed more thoroughly in responses to Comments ADD-G.69-1 through ADD-G.69-5 above, and response to Comment ADD-G.70-1. The Commenter's preference for development in more developed areas is noted, was considered by the Regional Planning Commission, and will be provided to the Board of Supervisors. The County notes that the EIR thoroughly analyzes the Project's fire impacts and identifies feasible mitigation requirements to ensure less than

[3409] CALFIRE, Wildland Hazard and Building Codes Frequently Asked Questions: http://www.fire.ca.gov/fire_prevention/fire_prevention_wildland_faqs.
[3410] CALFIRE, Fuels Treatment: http://www.calfire.ca.gov/resource_mgt/resource_mgt_EPRP_FuelsTreatment.

significant impacts. As more thoroughly discussed in response to Comment ADD-G.70-1, designation of fire hazard severity zones is not intended to prevent all development, but rather to help limit wildfire damage to structures through planning, prevention, and mitigation activities/requirements that reduce risk.[3411] Further as the Project is built out over 20 years, the Fire Codes, standards, and guidelines would likely be continually updated by the State and County agencies as the knowledge gained from past fires is increased; these updated code requirements, as finalized through discussions with the LACFD, would be applied to subsequent development phases of the Project to ensure that Project development continues to meet evolving standards to ensure impacts are less than significant. (Draft EIR, page 5.3-37)

[3411] CALFIRE, Wildland Hazard and Building Codes Frequently Asked Questions: http://www.fire.ca.gov/fire_prevention/fire_prevention_wildland_faqs.

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August 24, 2018

Via Electronic Mail
Los Angeles County Regional Planning Commission
c/o Ms. Rosie O. Ruiz
320 West Temple Street, 13th Floor, Room 1350
Los Angeles, California 90012
rruiz@planning.lacounty.gov

Re: Centennial Project Final Environmental Impact Report

Dear Commissioners,

As I write, there are almost 20 wildfires actively burning in California. Almost one million acres of land have burned in 2018. This is the second year in a row we are seeing historic levels of wildfires in California. What is perhaps most frightening is that burned area in 2018 is double that of 2017, and peak wildfire season is still approaching. This trend in increased fire activity extends back many decades. With rising temperatures, prolonged droughts, and urban developments in fire-prone areas fueling these fires, it is time that planners rethink how and where we build our homes.

As a professor researching fire disasters in sub-urban contexts, I am deeply concerned about the proposed Centennial project slated to put >19,000 homes in high and very high fire hazard areas. If we want to keep Californians safe, we can no longer ignore warning signs of immense fire risk. Building developments in fire prone areas will only lead to disaster. In fact, it is *the* most important cause of fire disasters. They will cause more human-induced conflagrations from things like arson, vehicles, improperly disposed cigarettes, or sparks from electrical power lines. They will also provide additional fuel from petroleum-based products in homes, such as wood interiors, paint, furniture, etc., which will facilitate the spread of larger and higher intensity fires where people are living.

I have experienced the chaos and destruction that wildfires at the urban interface cause first-hand. When I was a teenager living in Oakland, California, I was evacuated from my home during the 1991 Oakland Hills Tunnel Fire. More than 3,000 residential structures were destroyed, and 25 people were killed by that fire. Since then

ADD-G.70-1

I have dedicated my career to studying the interplay between urban development and environmental change, specifically focusing on the drivers and impacts of wildfires in the American West. These efforts recently culminated with the publication of a book titled *Flame and Fortune in the American West* (University of California Press).

To be sure, fires are ecologically important for California ecosystems, and historically they have been a natural occurrence throughout much of California's landscape. Areas would burn every 20 to 100 years, which would serve to clear out dead vegetation, provide important nutrients to the soil, and trigger reproduction in various plants. From the 1970s to the 1990s, California had an average of about 7,000 wildfires per decade, and each decade saw about 1.2 to 1.5 million acres burned. Although this may seem like a lot of damage, these fires were smaller, less deadly, less damaging, and more manageable than the more recent wildfires.

But today, we are now seeing larger, more frequent, and higher intensity wildfires. Fifteen of California's 20 largest fires in history have occurred after the year 2000, and much more land has been burned compared to previous decades. In the 2000s about 2 million acres burned in wildfires, and since 2010 over 2.3 million acres have burned.

These wildfires have severe health, social, and economic impacts because they occur in close proximity to human settlements. They cause deaths and injuries to residents and firefighters as well as trauma to the tens of thousands of people that have to evacuate their homes, lose their homes, and struggle to rebuild.

The costs of these wildfires have skyrocketed. Unfortunately, these costs are shouldered by California residents as well as state and federal taxpayers in the form of fire insurance premiums; management and upkeep of Cal Fire, California's Department of Forestry and Fire Protection; and federal government subsidies and hazard mitigation grants for homes in high risk areas.

Total cost of fire suppression (*e.g.*, personnel, equipment) and property damage (*e.g.*, burned down structures) in Cal Fire's State Responsibility Area was about $600 million in the 1980s, while the cost from 2010 to 2017 is already $6.6 billion (see Figure 1). The data presented do not include official damage costs from 2017 from Cal Fire; however, there was an estimated $12 billion in insurance claims that year. That would mean $18.6 billion in wildfire costs between 2010 and 2017, a 30-fold increase from the 1980s, with another severe fire season expected in 2018. California cannot sustain these patterns.

ADD-G.70-1 (cont'd)

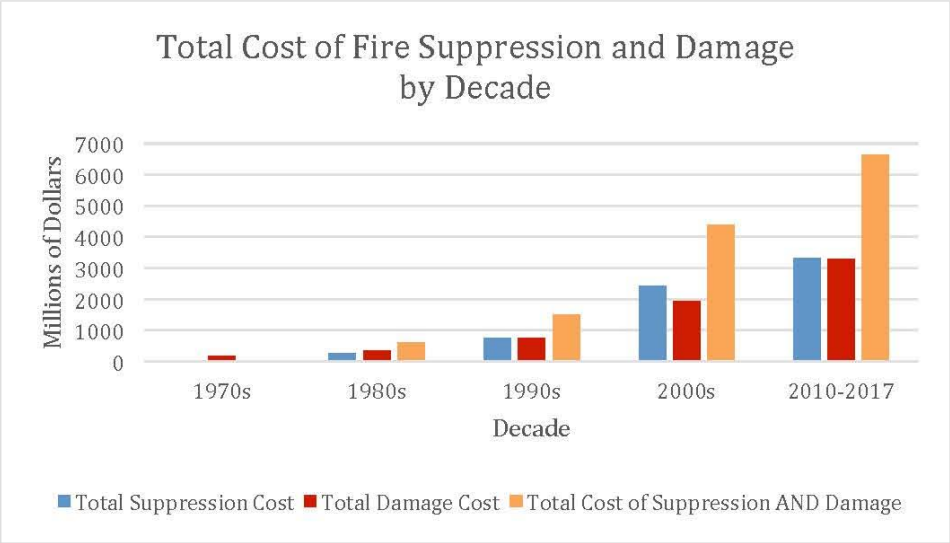

Figure 1. Total Cost of Fire Suppression and Damage by Decade in State Responsibility Areas. Data do not include 2017 damage costs. Data source: Cal Fire.

The proposed Centennial development would only exacerbate these already startling statistics. California's fire regime is being disrupted, and urban settlements extending into areas that are historically prone to wildfires are to blame. If California continues to grow its cities outwards, its residents will inevitably suffer from increasingly deadly and damaging wildfires.

The lessons here are loud and clear. We need to reform our growth strategies by discouraging developments in high fire risk areas and pushing cities to allow for greater densities. Urban planning and design should focus on infill developments in urban core areas, where people have access to jobs, public transit, and community. We can no longer dismiss California's natural fire regime, the impacts of climate change, or the direct relationship between urban sprawl and costly and dangerous wildfires. Please say "NO" to Centennial.

ADD-G.70-1 (cont'd)

Thank you for your time.

Sincerely,

Gregory Simon

Gregory Simon, Ph.D
Associate Professor, Department of Geography and Environmental Sciences, University of Colorado Denver
Research Affiliate (previously), Institute of the Environment and Sustainability, University of California Los Angeles and Center for Spatial and Textual Analysis, Stanford University

Response to Comment Letter ADD-G.70
Gregory Simon, Ph.D.
August 24, 2018

Response to Comment ADD-G.70-1:

Thank you for your participation in this public process. This comment was provided to the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. The information the Commenter presents about wildfire statistics, and the Commenter's opinion that the Project site should not be developed due to fire risk is noted for the record. However, the County notes that the EIR appropriately evaluates the Project's fire safety impacts under two thresholds of significance in Section 5.3, Hazards and Fire Safety. First, the Draft EIR considers whether the Project would expose people or structures to a significant risk of loss, injury or death involving fires because it is located (i) within a Very High Fire Hazard Severity Zone (VHFHSZ), (ii) within a high fire hazard area with inadequate access, (iii) within an area with inadequate water and pressure to meet fire flow standards, or (iv) within proximity to land uses that have the potential for dangerous fire hazard. Second, the Draft EIR considers whether the Project constitutes a potentially dangerous fire hazard. The Draft EIR determined that, with implementation of MM 3-9, Project impacts related to fire hazards would be less than significant under both applicable thresholds of significance. The Draft EIR concluded that Project impacts related to fire safety would be less than significant only after taking into consideration (i) Project site access, (ii) Project site water flows, (iii) Project site topography, (iv) Project site vegetative cover, (v) existing and proposed regulatory controls, (vi) existing mutual aid agreements between federal, state, and local fire safety service providers, and (vii) Project improvements and mitigation measures related to landscaping and vegetation management, building construction, circulation, public utilities, and fire protection services, including but not limited to MM 3-9.

As disclosed in the Draft EIR and Final EIR Exhibit 5.3-2, the western and southeastern edges and eastern portions of the Project site are designated by the California Department of Forestry and Fire Protection (CAL FIRE) as a VHFHSZ, the western and central portions are designated as a High Fire Hazard Security Zone (HFHSZ), and the eastern edge is designated as a Moderate Fire Hazard Severity Zone (MFHSZ), and the potential for wildland fire hazards would exist at the wildland/urban interface due to (a) the presence of brush; (b) increased human activity; and (c) the increased potential for fires due to accidental and arson-related causes. (Draft EIR, pages 5.3-35, -36) CAL FIRE classifies a zone as having a moderate, high, or very high fire hazard based on a combination of how a fire will behave and the probability of flames and embers threatening buildings. These zones are not intended to prevent all development in high or very high fire hazard severity zones, but rather to help limit wildfire damage to structures through planning, prevention, and mitigation activities/requirements

that reduce risk.[3412] If development was prevented in high or very high fire hazard severity zones, the vast majority of Los Angeles County would be subject to development prohibitions, because the vast majority of Los Angeles County has been designated a VHFHSZ, with very small portions each designated HFHSZ or MFHSZ. (Los Angeles County General Plan, Figure 12.5) Rather, the zones are used to designate areas where California's wildland urban interface building codes apply to new buildings, they can be a factor is real estate disclosure, and local governments consider fire hazard severity in the safety elements of their general plans.[3413] The County Fire Chief periodically reviews Fire Hazard Severity Zone areas and makes recommendations to the Board of Supervisors to revise the limits of these areas based on changes in any of the evaluation criteria. (Draft EIR, page 5.3-33)

With regard to the Project and its current designations, as explained in the Draft EIR, current characteristics of the Project site that contribute to its hazard designation include (1) limited access, (2) lack of existing adequate fire flows, (3) topography, and (4) types of vegetative cover. (Draft EIR, page 5.3-33) The four above-identified characteristics of the Project site that contribute to its designation would be addressed as the Project site is developed, as follows and as discussed in Draft EIR pages 5.3-35 to -36:

(1) **Access**. The Project includes an extensive backbone vehicular circulation system that would provide five points of access to the site via SR-138. The design of the Project's internal circulation system would implement the County standards, as applicable, regarding access (i.e., roadway widths, length of single access streets, cul-de-sac dimensions, street parking restrictions) (see Section 5.10, Traffic, Access and Circulation, for additional discussion of roadway design). Additionally, the Project will incorporate up to four new fire stations within the Project site. Consequently, access would be improved from the existing condition and impacts associated with emergency fire response would be less than significant with incorporation of emergency response requirements (MM 3-7).

(2) **Fire Flows**. Exhibit 4-13, Centennial Project – Conceptual Domestic Water System, shows the Project's water system that would provide water supplies to support proposed land uses and provide adequate fire flows and pressure to support any fire-suppression activity in the event of wildland or structural fires (refer to Section 5.18, Water Resources, for further discussion of the water system). The proposed water system includes water mains, water tanks, pump stations (where necessary), and fire hydrants to ensure sufficient fire flows and water pressure to meet County of Los Angeles Department of Public Works' and LACFD's fire-suppression standards for improved property and development. These standard requirements must be met prior to the approval of building permits; therefore, the Project would implement a water system that would

[3412] CALFIRE, Wildland Hazard and Building Codes Frequently Asked Questions: http://www.fire.ca.gov/fire_prevention/fire_prevention_wildland_faqs
[3413] Id.

meet all County requirements in support of fire-suppression activities so that less than significant water-related fire hazards would occur.

(3) **Topography.** Topography is connected to wildland fire hazards because steep slopes are not only inaccessible to fire fighting vehicles, but steep canyons can create updraft conditions (much like a chimney) and a fire in a steep canyon can spread rapidly into adjacent areas. Steep canyons that are densely covered with combustible vegetation are especially hazardous. The Project's land uses would be developed in accordance with fuel modification requirements to ensure appropriate buffer zones for protection from wildfire events (MM 3-9). Areas of the Project site that are undeveloped and contain steep slopes would restrict human access to the use of trails. Despite limited access to the general population, and the portions of the site with the greatest topographic relief would be accessible to fire-fighting equipment via helicopter, other air transport access, and existing unpaved fire roads. As required by the LACFD, upon their Project-level review (e.g., tract map review), clearance for fire access roads and gates would be incorporated into developed areas. Implementation of the Fuel Modification Plan (MM 3-9) for the Project would ensure that impacts would be less than significant

(4) **Vegetative Cover.** The majority of residential development is proposed for the flatter portions of the Project site. Some residential development, however, is proposed in areas that would be adjacent to large open space areas with moderate vegetative cover. The plant communities that make up this cover are highly combustible and would therefore present a high fire hazard and pose a potentially significant impact to development in these areas. With MM 3-9 for fuel modification requirements, impacts related to fire hazards would be less than significant.

Additionally, as required by MMs 16-1 through 16-3, the Project will provide within the Project site up to four new fire stations each staffed by a minimum four-person engine company. In Village 1, one fire station is proposed east of the National Cement Plant Road. The second fire station is proposed in Village 4, and the third fire station is proposed in Village 7, with the location of a potential fourth station to be determined. These new fire stations are projected to provide an average five-minute response time for the first arriving unit for fire and eight minutes for the advanced life support (paramedic) unit on the site at Project buildout. This is consistent with the County of Los Angeles Fire Department's (LACFD's) goals for response times in urban areas. Ultimately, the LACFD would approve the final station site locations, and the Applicant would construct and equip the fire stations (MM 16-3). The LACFD has indicated that the proposed fire stations on the site would provide adequate fire service to the Project. Moreover, per MM 3-7, the Project must prepare an Emergency Response Plan for LACFD approval and, per MM 3-8, the Project must prepare a Traffic Control Plan in accordance with the California Manual on Uniform Traffic Control Devices for Caltrans approval. Consequently, access to, from, and in the vicinity of the Project site will be substantially improved from the existing condition.

Under Project conditions, the Angeles National Forest would also have far greater access to fire protection and emergency services in the vicinity of Project site than currently exists. Such access will contribute to LACFD's performance of its obligations under the *Cooperative Fire Protection Agreement Between The County Of Los Angeles Fire Department And The U.S. Forest Service Angeles National Forest* (Mutual Aid Agreement), approved by the Los Angeles County Board of Supervisors on December 20, 2016. The purpose of the Mutual Aid Agreement is to provide for cooperation between LACFD and U.S. Forest Service Angeles National Forest (ANF) in the prevention, detection, and suppression of wildland fires, fuels treatment and prescribed fires with both agencies' respective fire protection areas. The Mutual Aid Agreement also describes the conditions in which "mutual aid" periods are established to provide resources to each on a non-reimbursable basis, as well as the conditions of "Assistance by Hire" on a reimbursable basis. The Project's fire service improvements described above will significantly enhance the LACFD's ability to perform its obligations under the Mutual Aid Agreement to the benefit of the ANF in the vicinity of the Project site.

The County of Los Angeles' standards for fire safety would also be applied to the Project to ensure appropriate building design and materials, as specified in Chapter 7A of the County Building Code (Title 26) and in the Fire Code (Title 32), in compliance with California's wildlands building codes (Chapter 7A) and as discussed more fully at Draft EIR pages 5.3-33 and -34. The Project's proposed Specific Plan further ensures appropriate building placement and design by requiring LACFD review of all Project tentative tract maps and amendments. (Final EIR, Appendix 4.0-A.Rev, pages 4-12, -14) Moreover, to further protect against fire, the Specific Plan's General Development Standards expressly prohibits the use of wood-burning fireplaces on the Project site. (Id., page 2-70) Finally, public access would be restricted in areas of the Project site that are undeveloped and contain steep slopes in accordance with the Specific Plan's Trail Plan and Open Space Management Plan. (Id., pages 3-88, -94) Despite limited access to the general population, those areas of the site with the greatest topographic relief would be accessible to fire-fighting equipment via helicopter, other air transport access, and existing unpaved fire roads. As required by the LACFD, upon their Project-level review (e.g., tract map review), clearance for fire access roads and gates would be incorporated into developed areas. Finally, Project implementation of the Fuel Modification Plan required by MM 3-9 would further reduce fire hazards at the wildland/urban interface. For further information regarding requirements of the Fuel Modification Plan, please see Draft EIR, pages 5.3-31, -32, and Final EIR, responses to Comments A.2-6 and F.8-63.

Compliance with State and County regulations that apply to the proposed Project is required. With adherence to the required and best-accepted practices for fuel-modification zone management, emergency access, building materials and methods, as well as the changes in land use, and existing mutual aid agreements, the Project's potential to constitute a potentially dangerous fire hazard, or to expose people or structures to a significant risk of loss, injury or death involving fires, would be reduced to a less than significant level. The Commenter provides to evidence to support an assertion that EIR analysis is insufficient, and

no further response is required. For additional responses to fire safety risk comments, please see responses to Comments ADD-G.69-1 through ADD-G.69-6.

With regard to the Commenter's preference for infill development, such preference is noted, has been considered by the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. The County notes that the EIR recognizes that while the Project site is not infill, it has been situated and designed to promote "smart growth" planning principles established by SCAG's 2016 RTP/SCS and the County's AVAP for the purpose of sustainably accommodating regional growth projections in a manner that reduces criteria pollutant and greenhouse gas emissions and promotes public health, and the Project does not constitute sprawl. Please see Final EIR responses to Comments F.8-20, F.8-191, and F.8-204 for further discussion.

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From: ExecutiveOffice
To: PublicHearing
Subject: FW: Oppose the Centennial Specific Plan
Date: Monday, August 27, 2018 11:10:50 AM
Attachments: image001.png

EXECUTIVE OFFICE
BOARD OF SUPERVISORS

The following correspondence is being forwarded to you for your review and handling. Please confirm receipt and update the ExecutiveOffice@bos.lacounty.gov on the status and/or resolution.

We welcome your feedback and questions at the Customer Service Center: (213(974-1411 or reply back to this email.
Katherine Medina
Customer Service Center
Executive Office
Board of Supervisors

From: Ann Dorsey [mailto:aedorsey@hotmail.com]
Sent: Saturday, August 25, 2018 9:13 PM
To: ExecutiveOffice
Subject: Oppose the Centennial Specific Plan

Los Angeles County Board of Supervisors,

I ask that you oppose the Centennial Specific Plan which would create of a new city with 19,323 residences, approximately 55,000 people and 10.2 million square feet of commercial development, in an unpopulated ecologically unique area of northwest Los Angeles County for the following reasons: ADD-G.71-1

--The project would be located on top of the San Andreas Fault and subject to high fire danger. ADD-G.71-2

--It is located far away from other developed areas (40 miles from Lancaster and 60 miles from Los Angeles) which would require long commute times and degrade a large area of wilderness, well beyond the the city's boundaries, to develop the infrastructure (roads, water supply, electricity, etc.) necessary to support the community. ADD-G.71-3

-- It is a site of ecoregional transitions at the junction of the Antelope Valley, Tehachapi Mountains, and the Liebre Mountains where ecological and evolutionary processes of statewide importance take place.

ADD-G.71-4

-- It is home to at risk wildlife and plants including California condors, pronghorn “antelopes”, 10 oak species, and 6 other plants, is the site of some of the finest native perennial grassland and wildflower habitats that remain in California and is a critical biological corridor necessary for preserving biodiversity.

ADD-G.71-5

-- The proposed mitigation ratio of 1.8:1 (conserved to developed ratio) is too low. At a minimum the area should be mitigated at a rate of 3:1 because of the incredible biodiversity of the area. Tejon Ranch is just 0.25 % of California's acreage, but it includes 14% (911 plants) of the state's native flora.

ADD-G.71-6

We need to be thoughtful about where future development takes place. Starting a community in an area where residents would be subject to strong earthquakes and frequent wildfires, that is far away from other developed areas (increasing greenhouse gas emissions and exacerbating the effects of climate change) and would destroy habitat critical to maintaining the biodiversity of the state is not a good place to do so. It is just the opposite. Please do what is best for Californians and the future and oppose this project.

ADD-G.71-7

Sincerely,

Ann Dorsey
Northridge, CA 91325

Response to Comment Letter ADD-G.71
Ann Dorsey
August 24, 2018

Response to Comment ADD-G.71-1:

Thank you for your participation in this public process. The Commenter's opposition to the Project is noted, was provided to the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR, and no further response is required.

Response to Comment ADD-G.71-2:

The Commenter's statements regarding Project site proximity to the San Andreas Fault and the risk of fire is noted. With regard to the San Andreas Fault, the potential for the San Andreas Fault and other active faults in the region to generate moderate to severe ground shaking is fully disclosed and addressed in the EIR. (Draft EIR, page 5.1-3) A probabilistic seismic hazard analysis was prepared for the Project consistent with State and County building code requirements and is summarized on Draft EIR pages 5.1-11 and 5.1-12. As shown, the Project site has seismic hazard parameters resulting in peak ground accelerations of 72 to 118 percent the force of gravity, depending on the probability of occurrence. When considering the seismic hazard analysis as well as soil conditions on the site and planned structures, the geotechnical engineer for the Project concluded that there are no soil or geologic (which includes seismic) conditions that would preclude development of the proposed Project, provided that additional site-specific geotechnical studies are performed during later phases of Project implementation, such as tract maps. (Draft EIR, Appendix 5.1-A, page 13) Requirements for site-specific geotechnical analyses as part of tract map processing are part of the County Building Code. Although it may seem as though the Project area may experience heightened seismic activity due to proximity to the San Andreas Fault or past fault activity, in reality "…the overall seismic risk at the Project site is the same as Southern California in its entirety". (Draft EIR, page 5.1-15) In other words, because of the extremely high seismicity throughout Southern California, the nearness of one or more active faults does not have a direct correlation to risk of a seismic event and the magnitude of the event in a certain area.

With regard to fire risk, the EIR appropriately evaluates the Project's fire safety impacts under two thresholds of significance. First, the Draft EIR considers whether the Project would expose people or structures to a significant risk of loss, injury or death involving fires because it is located (i) within a Very High Fire Hazard Severity Zone (VHFHSZ), (ii) within a high fire hazard area with inadequate access, (iii) within an area with inadequate water and pressure to meet fire flow standards, or (iv) within proximity to land uses that have the potential for dangerous fire hazard. Second, the Draft EIR considers whether the Project constitutes a potentially dangerous fire hazard. The Draft EIR determined that, with implementation of MM 3-9, Project impacts related to fire hazards would be less than significant under both applicable thresholds of significance. The Draft EIR concluded that

Project impacts related to fire safety would be less than significant only after taking into consideration (i) Project site access, (ii) Project site water flows, (iii) Project site topography, (iv) Project site vegetative cover, (v) existing and proposed regulatory controls, (vi) existing mutual aid agreements between federal, state, and local fire safety service providers, and (vii) Project improvements and mitigation measures related to landscaping and vegetation management, building construction, circulation, public utilities, and fire protection services, including but not limited to MM 3-9. This testimony does not specifically address the adequacy of the EIR, and no further response is required. For further discussion of fire impacts, see Draft EIR, Section 5.3, and Final EIR, response to Comment A.2-6. This comment does not address the adequacy of the EIR, and no further response is required.

Response to Comment ADD-G.71-3:

The Commenter's opposition to the Project because the Project site is removed from other urban areas and Project development would unduly "degrade" a large area of wilderness was considered by the Regional Planning Commission and will be provided to the Board of Supervisors. However, the County disagrees with the Commenter's characterization of the Project. First, the Project site is not appropriately described as "wilderness," because it has been primarily used for livestock grazing for more than 150 years, while approximately 1,000 acres in the eastern portion of the site have been cultivated as 5 separate pivot fields. (Draft EIR, page 3-9) The EIR thoroughly evaluates the Project site with regard to its ecological value and Project-related impacts on biological resources, and mitigates impacts with enforceable, feasible mitigation measures. Please see Draft EIR, Section 5.7, Biological Resources, and Final EIR Appendix 2.0-C.Rev Mitigation Monitoring and Report Program for further information. With regard to this comment's concerns regarding the length of Project trips, as discussed on Draft EIR page 5.10-51, the North County Sub-Area Model project's that 40 percent of the trips made on site would be 3 miles or less in length, and nearly 70 percent of all internal trips would be 4 miles or less. The model estimates that an average external trip will be 45.9 miles in length, and that the average Project trip is estimated to be 25.5 miles in length. This comment does not address the adequacy of the EIR, and no further response is required.

Response to Comment ADD-G.71-4:

As noted by the Commenter, the Project region is ecologically important for many reasons. The area encompasses an important linkage between the San Gabriel Mountains and the Tehachapi Mountains, representing the only mountain linkage from the Transverse Ranges or the Pacific Coast Range to the Sierra Nevada Range (PCR et al. 2000). As noted on page 5.7-8 of the Draft EIR, SEA 17 is identified as significant due to position within a region where multiple diverse biomes (a community of plants and animals) and wildlife corridors come together. It contains a unique mosaic of vegetation types that represent a transitional area between the Mojave Desert, the Coast Ranges, and the Tehachapi Mountains. Much of this important land is included in the Project's proposed Mitigation Preserve. The proposed 43,080-acre mitigation preserve system contains all major habitat types affected by the Project, as well as particular individual biological resource values. The biological value of the proposed preserve system is further enhanced by its continuity with other open space areas.

While it is acknowledged that the Project site occurs within this important ecozone, vast swaths of biologically rich land is preserved through the Project's mitigation process. For discussion of wildlife movement and habitat connectivity, please see response to Comment ADD-G.71-5. This comment does not address the adequacy of the EIR, and no further response is required.

Response to Comment ADD-G.71-5:

The EIR appropriately documents the Project site's potential for wildlife, special-status plant species, and grassland/wildflower habitat to occur, analyzes Project-related impacts, and incorporates mitigation to reduce otherwise significant impacts. With regard to California condor, as discussed on page 5.7-148 of the Draft EIR, the Project is not likely to lead to events that significantly impact the California condor. Furthermore, as described on page 5.7-148, and as further revised in the Final EIR, MM 7-6 is included to further ensure that the proposed Project does not result in future impacts on the California condor. For further discussion with regard to California condor, please see Draft EIR, Section 5.7, pages 5.7-94, -119, and -120, Final EIR, responses to Comments B.4-20 to B.4-23 and F.8-138 to F.8-143, and Response to Testimony RPC-197.

With regard to pronghorn antelope, a herd of pronghorn resides in the Antelope Valley. The pronghorn is not on the CDFW list of Special Animals, and CDFW in fact occasionally issues permits for hunting of this herd, but the EIR specifically acknowledges that there is an interest in maintaining this herd. Draft EIR, pages 5.7-153; Final EIR, response to Comment B.4-35. The EIR therefore provides an appropriate impact analysis which is consistent with standard practices for sensitive species and the best available scientific information, including on-site observations, in suitable habitat areas. As noted in the Final EIR, the Project's crossing opportunity under SR-138 connecting areas of appropriate habitat would serve the pronghorn. (Final EIR, response to Comment B.4-36) Further, the RWMP requires the Project Applicant to work with the Tejon Ranch Conservancy to identify and implement potential enhancement measures for pronghorn that are also supported by CDFW. (Final EIR, response to Comment B.4-35) For further discussion specific to pronghorn antelope, see Draft EIR, Section 5.7, pages 5.7-50, -54, -127, -128, and -153, and Final EIR responses to Comments B.4-34 to B.4-37 and F.8-165 to F.8-168.

With regard to oaks, the Project considers impacts to all oak trees as part of the oak woodland impact assessment described on pages 5.7-171 and 5.7-172. Significant impacts to oak tree resources would be reduced to less than significant levels with implementation of MMs 7-11, 7-19, and 7-20. As discussed in Draft EIR page 5.7-182, MM 7-11 requires a minimum 2:1 replacement of impacts mixed oak woodland (13.4 acres total), and 10:1 mitigation for impacts to heritage trees. It should also be noted that Project implementation will preserve 3,090 acres of oak woodland within the Mitigation Preserve. Furthermore, the preserved oak woodlands are very similar to the oak woodlands impacted by the Project. For further discussion specific to oaks and oak woodlands, please see Final EIR responses to Comments A.2-7, B.4-50, B.4-51, B.4-80, and F.8-132 through F.8-125.

With regard to the 6 special-status plant species for which the EIR identifies impacts, the Project's priority is preservation. Prior to issuance of grading permits, detected special status plant species populations on the Mitigation Preserve meeting the 2:1 mitigation ratio, shall be quantified and documented for preservation in perpetuity. If the preservation ratio is less than 2:1 for one or more of the six species, enhancement and/or creation to expand preserved population(s) of the species to a quantity representing a minimum 2:1 ratio within the Mitigation Preserve shall be accomplished. Beyond preservation (the priority for plant mitigation goals), the preferred method for achieving the 2:1 replacement ratio of special status plant species is enhancement or expanding of existing populations. Creation of populations is the method that shall be employed if the 2:1 ratio cannot be met through preservation and enhancement. As further discussed in Final EIR, response to Comment F.8-173, the EIR sets forth applicable performance standards and feasible actions for achieving them, including with regard to the Special Status Plant Species Restoration Plan identified in MM 7-1. For further discussion with regard to these special status plant species, please see Draft EIR, Section 5.7, Biological Resources, and Final EIR, responses to Comments F.8-128 to F.8-130, F.8-173.

With regard to grassland, Draft EIR Section 5.7, Biological Resources, discloses the Project's impact to grasslands and determines that direct and indirect impacts would be mitigated to a less than significant level, but cumulative impacts to native grasslands would be a cumulative significant impact. (Draft EIR, pages 5.7-158, -162.) Project implementation would include mitigation at a ratio of at least 2:1 for grasslands, resulting in improved functions and values of grasslands on the Project site, in addition to preservation in perpetuity within the Centennial Mitigation Preserve as described in PDF 7-1 on page 5.7-135 of the Draft EIR. Intensive, multi-year grassland studies have revealed that grasslands of equal or greater value occur in vast quantities in the Mitigation Preserve. Please see Final EIR, responses to Comments B.4-17, B.4-43, B.4-63, F.7-22, F.8-124, F.8-125, F.8-127, F.8-128, and F.8-131 for further discussion of grasslands. With regard to wildflowers, after thorough and appropriate analysis, the EIR concludes that Project mitigation measures and the preservation of 14,908 acres of grasslands coupled with long-term management through implementation of the Ranch-wide Management Plan will sufficiently offset and fully mitigate for impacts on wildflower fields associated with the Project. See Draft EIR, Section 5.7, Biological Resources, and Final EIR, responses to Comments B.4-17, B.4-43, F.3A-19, F.8-119, F.8-123 to F.8-125, and H.21-1 for further discussion of impacts to and mitigation to address such impacts to wildflower fields.

The EIR appropriately analyzes impacts to habitat connectivity, and the Project design and mitigation would ensure less than significant impacts. In the wildlife movement assessment, connectivity between the Tehachapi Mountains and the San Gabriel Mountains was considered in detail (Draft EIR, pages 5.7-50 to -64, -164 to -170). The thorough assessment concluded that although maintaining baseline connectivity between the two regions is essential, development of the Project would not significantly impact movement between these regions (*Id.,* page 5.7-166). The wildlife movement impact analysis beginning on page Draft EIR page 5.7-164 does conclude that development of the Project site will result in some losses of areas that may be used for foraging and/or breeding for species; pathways to or

from foraging or breeding grounds on the Project site, such as along ridge-lines or canyon bottoms, may become "dead ends" to through dispersal. However, these losses are not expected to significantly impact wildlife movement, and sufficient habitat connectivity would be retained in the region for these species, especially given the substantial amount of similar terrain in the northwestern Antelope Valley area. Further, two regional conservation plans, the Tejon Ranch Conservation and Land Use Agreement and the TUMSHCP, although not providing mitigation for Centennial, would act in concert with the Centennial mitigation preserves to help sustain the functionality of the regional landscape linkage for future wildlife populations. Multi-generational gene flow (a series of connected wildlife movement events over time, allowing for genes to pass within and between populations) among wildlife populations in the region is expected to be sustained in the open spaces on and off the site that will remain following Project implementation. These open spaces provide sufficient habitat connectivity to allow for such gene flow. Implementation of MM 7-14, which designates a SR-138 wildlife underpass (along with a 50-foot open space buffer) where the current intersection with National Cement Plant Road exists, will also allow for local wildlife movement to pass through the Project area down to SEA 17. The direct impacts of Project development on wildlife movement, therefore, are considered less than significant after mitigation for local wildlife movement impacts. Nonetheless, the Draft EIR (page 7-17) discloses that the Project when combined with other projects in the region would result in a cumulatively significant impact on wildlife movement. Lastly, the Project design is consistent with the Antelope Valley Area Plan (AVAP) including with regard to open space designations, SEA protection, and preservation of habitat linkages. For further discussion of wildlife movement and habitat connectivity, please see Final EIR, responses to Comments B.2-3, B.4-34 to B.4-37, B.4-56, B.4-57, B.4-75, F.3-23 to F.3-25, F.3A-32 to F.3A-34, F.5-2, F.7-22, F.8-109, F.8-110, and F.8-165 through F.8-169.

This comment does not address the adequacy of the EIR, and no further response is required.

Response to Comment ADD-G.71-6:

The Commenter's opinion that the Project does not preserve enough land is noted, was considered by the Regional Planning Commission, and will be provided to the Board of Supervisors. The County notes that 1.8:1 is not the Project's "conserved to developed" ratio, and the area preserved compared to the Project's development envelope in fact exceeds the 3:1 ratio requested by the Commenter, and is between approximately 3:1 and 4:1. The Mitigation Preserve associated with the Project encompasses 43,079 acres of land to be preserved and managed in perpetuity for biological resources values. It consists of an On-site Mitigation Preserve, comprised of approximately 3,866 acres within the Project boundaries, but outside of the development footprint, and an Off-site Mitigation Preserve made up of 39,213 acres within adjacent and nearby off-site lands. These mitigation land provide sufficient land and biological resource values to implement mitigation strategies to fully mitigate for Project biological resource impacts, as more fully discussed in Draft EIR, Section 5.7, Biological Resources, and Final EIR, responses to Comment B.4-64 and F.8-18. The Commenter provides no evidence that Project-related mitigation is inadequate, and no further response is required.

The comment regarding the percentage of land within the State and the percentage of native species present relative to the State refer to the entire 270,000-acre Tejon Ranch property. As described in the Project Description of the Draft EIR (Section 4.5.7), approximately 90 percent of Tejon ranch lands are open space dedication and acquisition areas. The Centennial Project site only represents 0.05 percent of Tejon Ranch, and a portion of that is to be preserved as part of Project-related mitigation. Therefore, the Project's disturbance area represents approximately 0.02 percent of Tejon Ranch and represents approximately 0.0007 percent of land within the State. Furthermore, the number of native plant species that have been detected on the Centennial Project site is 315 based on the Plant Compendium in Appendix 5.7-A of the Final EIR. Assuming the Commenter's information regarding the number of native species occurring throughout the State is correct (911=0.14x; equals 6,507 natives in the State), approximately 4.8 percent of the State's flora is represented on the Centennial Project site, which is considerably less than the Commenter's assertion of 14 percent.

Response to Comment ADD-G.71-7:

The Commenter reiterates their opposition and summarizes some of their previous comments. With regard to earthquake and fire safety impacts, please see response to Comment ADD-G.71-2. With regard to biological resources, please see responses to Comments ADD-G.71-3 through G.71-6.

With regard to the Commenter's assertion that the Project would exacerbate the effects of climate change, the County notes that as discussed more fully in Final EIR, response to Comment F.8-20, the Project has been sited and designed to promote regional "smart growth" planning principles established by the Southern California Association of Governments' (SCAG) 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy and the County's Antelope Valley Area Plan for the purpose of sustainably accommodating regional growth projections in a manner that reduces criteria pollutant and greenhouse gas (GHG) emissions and to promote public health. CARB has determined that implementation of the 2016 RTP/SCS would achieve SCAG's per capita GHG reduction target of 8 percent by 2020 and would achieve an 18 percent per capita GHG reductions by 2035 (exceeding the SCAG 2035 target of 13 percent by five percentage points). Further, the South Coast Air Quality Management District (SCAQMD) has determined that the Project's Centennial Specific Plan "exemplifies [the County's] leadership in promoting sustainable communities development" and "will help reduce emissions from mobile sources, protect the public health from air pollution, and achieve healthful air in the [South Coast Air] Basin" (see Final EIR, Comment D4-2). As discussed in Final EIR, response to Comment F.8-204, the EIR and Project include an aggressive approach to reducing GHG emissions arising from the Project. The EIR includes 46 measures to reduce GHG emissions from project operations and/or construction activities (MMs 10-1, 10-25, 10-26, 11-1 through 11-7, 13-6, 14-1, 17-9, 17-10, 18-1, 18-2, 19-1 through 19-5, 20-2.1, 20-2.2, 20-3.1 through 20-3.3, and 21-1 through 21-20). In addition, the Specific Plan includes additional commitments to sustainable design and operational practices which minimize GHG emissions, as detailed in response to Comment F.8-204, and mitigation measures have been revised and added in response to comments on the Draft EIR to further reduce the Project's GHG emissions. See

revised and added mitigation measures as set forth in Final EIR responses to Comments F.2-2, F.2-5, F.3-29, F.3-34, F.8-189, and F.8-204.

However, climate change is a global phenomenon and the significance of greenhouse gas emissions is inherently cumulative in nature. Although many other agencies with the necessary jurisdiction are currently taking action to reduce GHG emissions, the County cannot assure that these measures would ultimately be implemented by such agencies or sufficient to address climate change given its jurisdictional limitations. Therefore, the Draft EIR conservatively determined that the Project's incremental contribution to the global GHG emissions inventory would be considered cumulatively considerable and that this cumulative impact would be significant and unavoidable, even though the Project satisfies several "pathways to compliance" identified by the *California Supreme Court in Center for Biological Diversity v. Department of Fish and Wildlife* (2015) 62 Cal.4th 2004.

Following publication of the Final EIR, the Project's GHG analysis was updated in Attachment G – GHG Reduction Memo, to the July 11, 2018 Regional Planning Commission Public Hearing Staff Report ("GHG Memo"), at County's request. This revised analysis will be included in revision to the Final EIR. The updated GHG calculations in the GHG Memo show that Project-specific GHG emissions will be approximately 35 percent lower than the quantitative estimates included in the Draft EIR, based on GHG legal reduction mandates that were not in effect when the Draft EIR GHG emissions were calculated, more advanced GHG quantification methodologies, including newer versions of GHG emission models, and the quantification of GHG emissions from Project mitigation measures that reduce GHG emissions. The Updated GHG Calculations include: (1) emissions estimates from the most current version (16.3.2) of the California Emissions Estimator Model (CalEEMod); (2) updated information regarding applicable electric vehicle (EV) adoption rates; (3) estimated internal and external trip reductions attributable to the Project's single occupancy vehicle (SOV) mitigation measures; (4) updated estimates of the Project's water and wastewater energy use and emissions; and (5) revised estimates of the Project's solid waste GHG emissions based on applicable landfill diversion mitigation requirements.

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From: Michael Hayes
To: Samuel Dea
Subject: Centennial - Tejon Pass
Date: Tuesday, August 28, 2018 11:51:03 AM

Hello County Planning,

I'm worried that it's too late to submit my concerns as part of the public comment record (if that was even an option) regarding the proposal to develop 12,000 acres in Tejon Pass that I recently became aware of; even so, I can't resist sharing my disapproval of such an obvious misstep as we strive to achieve sustainable growth in a region that struggles with the nations worst air quality, the nations longest traffic delays, and a landscape known for wide freeways and parking lots devoid of an efficient urban form. Not only is the proposal completely unsustainable, it's depressingly irreversible and increasingly unsafe. ADD-G.72-1

Completely Unsustainable: In comparing other communities of equal distance from LA, namely Hesperia, Victorville, Beaumont, Banning, Hemet and Murrieta are within those boundaries, none of which have proven to be good examples by any stretch, in fact they are all great examples of why we shouldn't build any more exurb communities. Woefully long commutes, devoid of character or charm, no inherent appeal which fuels "brain drain" create Hemet is of particular interest as a community started with the same good intentions as Centennial. In the 30's through the 60s it was an idyllic agro-community, now it's charm and value has been decimated by crime and drug addiction, the result of its isolation and simultaneous dependence on distant commerce. ADD-G.72-2

Depressingly Irreversible: The beauty and value of Tejon Pass is in its natural state. Largely untouched and without blemish from stucco box homes, asphalt plains, big box retailers and other elements that have come to define *The United States of Generica*. I think it's important to consider that in the 1920's Southern California and Tuscany, Italy were remarkably similar save for the language and the buildings that dotted the landscape, the same topography, climate and agricultural output. Now the two couldn't be further apart, what was once bucolic and peaceful is now coated almost entirely in tasteless, unsustainable development that has produced world renowned traffic and air quality problems. When will we learn that suburbia is the lowest and worst use for such prized and naturally valuable land? ADD-G.72-3

Increasingly Unsafe: Lastly, as the state starts to accept the higher frequency of destructive wild fires, are these exurb and rural / urban fringe developments really a good long term idea? From Pismo Beach to Palm Springs, that series of mountain ranges has proven to be fire prone. These remote and smaller towns are at higher risk of fire destruction on the urban / rural fringe and without adequate resources to stave the intensity of this new classification of wild fire. ADD-G.72-4

For so many reasons, Centennial at Tejon Pass is the wrong move for the state! California is my home, it's really very sad to see how it's been destroyed by suburbia over a relatively short time period. From the San Fernando Valley to the orchard of Redlands and the groves of Riverside, the rolling hills of San Joaquin (now Irvine...) what made California so wonderful was its natural beauty, how many more acres of California must we sacrifice before we understand the true destruction of ill-thought development? ADD-G.72-5

Thank you for your commitment and effort to support the healthy lives of southern Californians

--

MH

Response to Comment Letter ADD-G.72
Michael Hayes
August 28, 2018

Response to Comment ADD-G.72-1:

Thank you for your participation in this public process. The County assures the Commenter that these comments were provided to the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. The Commenter's opposition to the Project is noted, but the County disagrees with the Commenter's characterization of the Project. For further discussion of the Project's sustainability, consistency with Smart Growth principles, and design to improve public health, please see Final EIR, responses to Comments F.8-20 and F.8-204. This comment does not specifically address the adequacy of the EIR and no further response is required.

Response to Comment ADD-G.72-2:

The Commenter's opposition to the Project's siting and opinion about other communities is noted. However, the County disagrees with the Commenter's characterization of the Project as unsustainable. Please see Final EIR, responses to Comment F.8-20 and F.8-204 for further discussion. The EIR appropriately limits its analysis to features of the proposed Project, and analysis of the mentioned communities is not required. Further, this comment does not specifically address the adequacy of the EIR or provide specific discussion about other communities and their commonality with the Project, and no further response is required.

Response to Comment ADD-G.72-3:

The Commenter's opposition to the Project's siting and opinion about other communities is noted. The County notes that per the Tejon Ranch Conservancy Ranchwide Agreement (Final EIR, Appendix 5.7-E), approximately 90 percent of Tejon Ranch, or approximately 240,000 acres, will be preserved in perpetuity. This comment does not specifically address the adequacy of the EIR, and no further response is required.

Response to Comment ADD-G.72-4:

With regard to fire, the EIR appropriately evaluates the Project's fire safety impacts under two thresholds of significance. First, the Draft EIR considers whether the Project would expose people or structures to a significant risk of loss, injury or death involving fires because it is located (i) within a Very High Fire Hazard Severity Zone (VHFHSZ), (ii) within a high fire hazard area with inadequate access, (iii) within an area with inadequate water and pressure to meet fire flow standards, or (iv) within proximity to land uses that have the potential for dangerous fire hazard. Second, the Draft EIR considers whether the Project constitutes a potentially dangerous fire hazard. The Draft EIR determined that, with implementation of MM 3-9, Project impacts related to fire hazards would be less than significant under both applicable thresholds of significance. The Draft EIR concluded that Project impacts related to fire safety would be less than significant only after taking into

consideration (i) Project site access, (ii) Project site water flows, (iii) Project site topography, (iv) Project site vegetative cover, (v) existing and proposed regulatory controls, (vi) existing mutual aid agreements between federal, state, and local fire safety service providers, and (vii) Project improvements and mitigation measures related to landscaping and vegetation management, building construction, circulation, public utilities, and fire protection services, including but not limited to MM 3-9. Specifically, with regard to protection from fire for surrounding open space areas and wildlife residing there, MM 3-9 requires implementation of a Fuel Modification Plan, whose major components will ensure a minimum 20-foot setback from the edge of any structures; an irrigation and transition zone from 20-100 feet away, and native brush thinning zone between 100 and 200 feet away from structures. For further details of fuel modification requirements, please see Draft EIR, Section 5.3, and Final EIR responses to Comments A.2-6, F.8-63, and F.8-64. With regard to wildfire and the urban-wildlands interface, please also see responses to Comments ADD-G.69-1 through ADD-G.69-6 and ADD-G.70-1, in this document.

Response to Comment ADD-G.72-5:

The Commenter's opposition to the Project is noted, was provided to the Regional Planning Commission and will be provided to the Board of Supervisors for consideration. This comment does not address the adequacy of the EIR, and no further response is required.

From: Diana
To: Jodie Sackett; cperry@bos.lacounty.gov; Kathryn@bos.lacounty.gov
Subject: Support Centennial at Tejon Ranch
Date: Tuesday, August 28, 2018 3:04:00 PM

Name : Diana
Last-name: Coronado
Email : dcoronado@bialav.org
Address : 350 S Bixel St
City : California
Zip:90017

Dear Commissioners:

LA County needs a solution to housing affordability! Centennial at Tejon Ranch is what LA County needs now more than ever!

The Natural Resources Defense Council (NRDC), Sierra Club, Audubon California, Endangered Habitats League and the Planning and Conservation League have all agreed to save 90% of the highest value and most biological diverse portions of Tejon Ranch.

Now, Centennial at Tejon Ranch will match the value of this unprecedented conservation and become a national model of an environmentally sustainable community for working-class Angelenos. It will power the entire community with its own clean, renewable energy, including achieving all 2016 CALGreen Tier 1 measures, use state-of-the-art water conservation measures, and with over 95 miles of trails and clustered development, it will allow the future of residences to walk and bike to work, schools, and retail services.

Centennial is a net zero electricity and net zero water community that will provide 19,000 new homes, 1,900 affordable units, 23,000 new jobs, $21.5 million in surplus to the County, all while preserving 240,000 acres of the most pristine natural lands in California.

The County of Los Angeles has already identified Centennial as an Economic Opportunity Area and the new community is consistent with the County's General Plan. Further, it is included in the Sustainable Communities Strategy and Regional Transportation Plan for the Southern California Association of Governments.

The solution to our County's housing affordability crisis is here!

Centennial is designed to be a sustainable, self-contained community. It embraces the smart-growth principles that are highly needed in the County of Los Angeles.

We need to approve this project, begin development on this much-needed community and allow for our housing crisis to come to an end.

ADD-G.73-1

Thank you.

--
This e-mail was sent from a contact form on We Need Housing (https://secure-web.cisco.com/1pRLMwfn--dU7-N4D44BjjT6mhiZ99PwQhLO_W1a5Y1UGNUFS8MzmSF_VtMx5F-mPjVGktBzMPAv1RDJ29odgqy_RMjgRhQwQED8KuHHuPz5t1E6i6nbuFBXO0qjtj1Bs8L6itivG3wHFSxg63WroMdhgw7gtEX6mz2FrmZjbZ6560nFiqe6GKnvxOG6I0A6-1G6_jy93qLNAL0Y3aSxUSy_JVbn6LohRotVZr-xXhdXYtyu2Kd1a1NKIqM5qXbHP060zi0LbXOT7Xd0ScLJgqATKcD1KptbA_k8MNqBmtkQCV0Te8rtgTyJfEvpj3XnEklUwUzVF79ttybtG8eKbnZj3YwNq71WMcMkyCMcy-GjLo_YrNfppaH-IGqWMI38bSABI7NVVDkrGoz_qzQqgrg/https%3A%2F%2Fweneedhousing.org)

Response to Comment Letter ADD-G.73
Diana Coronado
August 28, 2018

Response to Comment ADD-G.73-1:

Thank you for your participation in this public process. The Commenter's support for the Project is noted and this comment will be provided to the Regional Planning Commission and Board of Supervisors for consideration. This comment does not address the adequacy of the EIR and, therefore, no further response is required.

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Paul Edelman
5065 Catalon Avenue
Woodland Hills, CA
91364

Via Electronic Mail

August 28, 2018

Regional Planning Commission
Los Angeles County
320 W. Temple Street
Los Angeles, California 90012

Centennial Specific Plan Project - We the People Need Much Better
Project No. 02-232-(5)

Dear Planning Commissioners:

Your Commission is under no obligation to up-zone this vast tract of pristine land. Thus, this project is putty in the hands of your Commission to shape. You can get what the rest of the County wants--not what the developer wants. You should get a project that dramatically contracts the footprint while still providing ample new housing. You should get a homeless shelter and one third of the housing should be low income and some ultra low income. If Centennial Founders LLC does not want to build such a superior project that is their choice.

It is also your Commission's choice not to up-zone thousands of acres for a project that defies all that we have learned and been taught about sound land use and science over the past forty years. We all need a project that benefits the whole county not a project that so clearly is designed to maximize profits for a very select few individuals. We, the rest of the County, are counting on you to put your foot down and make this a progressive defining moment in County history not a horrible regressive one.

ADD-G.74-1

Sincerely,

Paul Edelman
Planner - Biologist

Response to Comment Letter ADD-G.74
Paul Edelman
August 28, 2018

Response to Comment ADD-G.74-1:

Thank you for your participation in this public process. These comments were provided to the Regional Planning Commission and will be provided to the Board of Supervisors for consideration, including with regard to the Commenter's suggested Project changes. The Commenter's opposition to the Project is noted. With respect to the Commenter's assertion that the Project is "upzoning," the County notes that the Project has been designed consistent with requirements of the AVAP, which the County approved in 2015 and which concentrates development in Economic Opportunity Areas (EOAs) including the Project site, which is the Western EOA. With regard to fiscal impacts, the Commenter's opinion is noted, but the County notes that as discussed in the Draft EIR, such as in Section 5.16, Fire and Law Enforcement, and Section 5.17, Other Public Services, the Project is responsible for providing infrastructure and services and would not create negative fiscal impacts on surrounding communities. The Project will provide significant net economic benefits to Los Angeles County, including expected annual revenues of $43,394,902.00, versus $21,827,596.00 of annual costs to the County's General Fund for re-occurring public services, representing an annual net benefit to the General Fund of about $21,567,306.00. The Project will also generate an estimated $22,328,502.00 of property tax revenues. With regard to an alternative that "dramatically contracts the footprint", as explained in the EIR, it does not analyzed such alternatives because substantial reductions would result in in a development proposal that is not consistent with the goals and policies of the AVAP related to development within the West EOR, or supportive of the Project's objectives of balance and providing a wide variety of housing.[3414] This comment does not address the adequacy of the EIR, and no further response is required.

[3414] Draft EIR, pages .8-10, -69.

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From: Steven Jones <sdjones@planning.lacounty.gov>
Sent: Wednesday, September 5, 2018 8:05 AM
To: Jodie Sackett
Subject: FW: Tejon Ranch

FYI

From: DRP LDCC
Sent: Wednesday, September 05, 2018 7:17 AM
To: Steven Jones <sdjones@planning.lacounty.gov>
Subject: FW: Tejon Ranch

From: Elizabeth Davidsohn <davidsohnelizabeth@gmail.com>
Sent: Thursday, August 30, 2018 6:08 PM
To: DRP LDCC <zoningldcc@planning.lacounty.gov>
Subject: Tejon Ranch

I don't agree with this planning of a new community in a Biodiverse wilderness of plants and animals.

It's ridiculous that people want to live 70 miles north of L.A.

Look at numerous times that Palmdale, Lake Los Angeles and Lancaster was deemed as a new community. Everyone drives to LA. For good paying jobs.

In my opinion, this land should stay as it is.

Tell Centennial to waste their money on Antelope Valley and build there for new community and jobs.

ADD-G.75-1

Thank you for not allowing this fiasco,
Elizabeth

Response to Comment Letter ADD-G.75
Elizabeth Davidsohn
August 30, 2018

Response to Comment ADD-G.75-1:

Thank you for your participation in this public process. The Commenter's opposition to the Project is noted, and this comment will be provided to the Board of Supervisors for consideration. First, the County notes that the Project site cannot fairly be described as "wilderness," because it has been primarily used for livestock grazing for more than 150 years, while approximately 1,000 acres in the eastern portion of the site have been cultivated as 5 separate pivot fields. (Draft EIR, page 3-9) The EIR thoroughly evaluates the Project site with regard to its ecological value and potential Project-related impacts on biological resources and mitigates impacts to the greatest extent feasible. Please see Draft EIR, Section 5.7, Biological Resources, and Final EIR Appendix 2.0-C.Rev Mitigation Monitoring and Report Program for further information. With regard to this comment's concerns regarding the distance of the Project site from Los Angeles and other communities, as discussed on Draft EIR page 5.10-51, the North County Sub-Area Model estimates that 40 percent of the trips made on site would be 3 miles or less in length, and nearly 70 percent of all internal trips would be 4 miles or less. The model estimates that an average external trip will be 45.9 miles in length, and that the average Project trip is estimated to be 25.5 miles in length. With respect to the comparison between the Project and other Antelope Valley communities (such as Lake Los Angeles, Lancaster, and Palmdale), the Project is designed as a complete, mixed-use community with a jobs-to-housing balance and integrated land use and circulation system that places recreational, commercial, and civic/institutional uses within comfortable walking and bicycling distances of residences. These land use and design features help to overall reduce the amount of offsite commuting trips compared with the other communities mentioned. This comment does not address the adequacy of the EIR, and no further response is required.

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From: Steven Jones <sdjones@planning.lacounty.gov>
Sent: Friday, August 31, 2018 9:48 PM
To: Jodie Sackett
Subject: FW: Tejon Ranch

FYI – for the record.

From: DRP LDCC
Sent: Wednesday, August 29, 2018 4:49 PM
To: Steven Jones <sdjones@planning.lacounty.gov>
Subject: FW: Tejon Ranch

From: Ed Salisbury <evs511@verizon.net>
Sent: Tuesday, August 28, 2018 10:39 PM
To: DRP LDCC <zoningldcc@planning.lacounty.gov>
Subject: Tejon Ranch

The proposed Tejon Ranch project is the wrong approach for development in Los Angeles county. For sustainable development, we should emphasize projects that complement our mass transit system (Tejon Ranch does not). We should also emphasize housing policies that encourage density, and reduce the need for automobile use (Tejon Ranch does not).

Tejon Ranch is the last gasp of the suburban sprawl approach, and it shares all the negative features associated with sprawl. It should not be approved.

ADD-G.76-1

Ed Salisbury
Santa Monica, CA

Response to Comment Letter ADD-G.76
Ed Salisbury
August 28, 2018

Response to Comment ADD-G.76-1:

Thank you for your participation in this public process. The Commenter's opposition to the Project is noted and this comment will be provided to the Board of Supervisors for consideration. With regard to the Commenter's assertion that the Project constitutes sprawl, please see Final EIR, response to Comment F.8-20. With regard to sustainability and Project design, the County disagrees with the Commenter's characterization and notes that the Project has been sited and designed to promote regional "smart growth" planning principles established by the Southern California Association of Governments' (SCAG) 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy and the County's Antelope Valley Area Plan for the purpose of sustainably accommodating regional growth projections in a manner that reduces criteria pollutant and greenhouse gas (GHG) emissions and to promote public health. This includes design features and mitigation requirements to address transit options and reduce single-occupancy vehicle use. CARB has determined that implementation of the 2016 RTP/SCS would achieve SCAG's per capita GHG reduction target of 8 percent by 2020 and would achieve an 18 percent per capita GHG reductions by 2035 (exceeding the SCAG 2035 target of 13 percent by five percentage points). Further, the South Coast Air Quality Management District (SCAQMD) has determined that the Project's Centennial Specific Plan "exemplifies [the County's] leadership in promoting sustainable communities development" and "will help reduce emissions from mobile sources, protect the public health from air pollution, and achieve healthful air in the [South Coast Air] Basin" (see Final EIR, Comment D4-2). This comment does not specifically address the adequacy of the EIR, and no further response is required.

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Dear Commissioners:

LA County needs a solution to housing affordability! Centennial at Tejon Ranch is what LA County needs now more than ever!

The Natural Resources Defense Council (NRDC), Sierra Club, Audubon California, Endangered Habitats League and the Planning and Conservation League have all agreed to save 90% of the highest value and most biological diverse portions of Tejon Ranch.

Now, Centennial at Tejon Ranch will match the value of this unprecedented conservation and become a national model of an environmentally sustainable community for working-class Angelenos. It will power the entire community with its own clean, renewable energy, including achieving all 2016 CALGreen Tier 1 measures, use state-of-the-art water conservation measures, and with over 95 miles of trails and clustered development, it will allow the future of residences to walk and bike to work, schools, and retail services.

Centennial is a net zero electricity and net zero water community that will provide 19,000 new homes, 1,900 affordable units, 23,000 new jobs, $21.5 million in surplus to the County, all while preserving 240,000 acres of the most pristine natural lands in California. ADD-G.77-1

The County of Los Angeles has already identified Centennial as an Economic Opportunity Area and the new community is consistent with the County's General Plan. Further, it is included in the Sustainable Communities Strategy and Regional Transportation Plan for the Southern California Association of Governments.

The solution to our County's housing affordability crisis is here!

Centennial is designed to be a sustainable, self-contained community. It embraces the smart-growth principles that are highly needed in the County of Los Angeles.

We need to approve this project, begin development on this much-needed community and allow for our housing crisis to come to an end.

Thank you.

Response to Comment Letter ADD-G.77
Form Letter 14
Various Dates

Response to Comment ADD-G.77-1:

A form letter was prepared by an unknown source and was made available to the public for submittal to the County via email. These form letters appear as Appendix A-14 to this document. The Commenters' support for the Project is noted, was provided to the Regional Planning Commission, and will be provided to the Board of Supervisors for consideration. This form letter does not specifically address the adequacy of the EIR and no further response is required.

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From: twschmahl@everyactioncustom.com on behalf of Matthew Schmahl <twschmahl@everyactioncustom.com>
Sent: Wednesday, October 24, 2018 1:08 PM
To: Jodie Sackett
Subject: Say No to the Centennial Boondoggle

Follow Up Flag: Follow up
Flag Status: Completed

Dear Jodie Sackett,

As a former and soon-to-be-again resident of Los Angeles county, Centennial is a terrible deal for the county. Centennial would be located in a "high" and "very high" fire hazard area subject to intense winds. Locating thousands of people in this fire-prone area will certainly lead to more human-caused wildfires, scorched homes and loss of life.

Wildlife in general and migratory birds in particular are currently being squeezed by federal policies in ways that they have not been in a century. Between climate change and non-enforcement of federal regulations, wildlife populations need all the safe havens we can provide them. The last thing we should be doing is developing wild, virgin land. It should remain just that: wild.

Centennial will not help address the county's housing shortage. Building a new city 65 miles from downtown LA will isolate potential residents from economic, educational and cultural opportunities. Instead, Centennial would require the construction of a new freeway at an initial cost of $830 million, which would divert scarce funds away from transit projects that make our existing communities more livable and sustainable.

ADD-G.78-1

Centennial would add tens of thousands of new cars each day onto Highway 5, leading to further gridlock in Santa Clarita and the San Fernando Valley. Thousands of long-distance car trips will lead to more cancer- and asthma-causing air pollution, worsening the county's public health.

Your decision on Centennial is perhaps the most far-reaching decision you will ever make as a supervisor. Please, don't approve Centennial. It would reward Wall Street speculators while leaving county residents stuck with the bill for more freeways, more wildfires, more traffic, and more air pollution.

Sincerely,
Matthew Schmahl
6436 New Gate Way Yorba Linda, CA 92886-6833 twschmahl@gmail.com

Response to Comment Letter ADD-G.78
Matthew Schmahl
October 24, 2018

Response to Comment ADD-G.78-1:

Thank you for your participation in this public process. The Commenter's opposition to the Project will be provided to the Board of Supervisors for consideration. This comment does not specifically address adequacy of the EIR, and no further response is required. However, the City notes that the EIR appropriately addresses all topics raised by the Commenter in compliance with CEQA requirements.

With regard to fire, the EIR thoroughly analyzes Project-related impacts and reduces impacts to a less than significant level with implementation of MM 3-9, including with regard to its location in Very High, High, and Medium Fire Hazard Severity Zones. The EIR appropriately evaluates the Project's fire safety impacts under two thresholds of significance. First, the Draft EIR considers whether the Project would expose people or structures to a significant risk of loss, injury or death involving fires because it is located (i) within a Very High Fire Hazard Severity Zone (VHFHSZ), (ii) within a high fire hazard area with inadequate access, (iii) within an area with inadequate water and pressure to meet fire flow standards, or (iv) within proximity to land uses that have the potential for dangerous fire hazard. Second, the Draft EIR considers whether the Project constitutes a potentially dangerous fire hazard. The Draft EIR determined that, with implementation of MM 3-9, Project impacts related to fire hazards would be less than significant under both applicable thresholds of significance. The Draft EIR concluded that Project impacts related to fire safety would be less than significant only after taking into consideration (i) Project site access, (ii) Project site water flows, (iii) Project site topography, (iv) Project site vegetative cover, (v) existing and proposed regulatory controls, (vi) existing mutual aid agreements between federal, state, and local fire safety service providers, and (vii) Project improvements and mitigation measures related to landscaping and vegetation management, building construction, circulation, public utilities, and fire protection services, including but not limited to MM 3-9. For further discussion of fire impacts, see Draft EIR, Section 5.3, and Final EIR, response to Comment A.2-6.

The Commenter's preference for preservation of the entire Project site is noted and will be provided to the Board of Supervisors. However, the County notes that the Project site cannot properly be considered "wild" because it has been primarily used for livestock grazing for more than 150 years, while approximately 1,000 acres in the eastern portion of the site have been cultivated as 5 separate pivot fields. (Draft EIR, page 3-9) Further, the EIR thoroughly evaluates the Project site with regard to its ecological value and Project-related impacts on biological resources, and mitigates impacts with enforceable, feasible mitigation measures. Please see Draft EIR, Section 5.7, Biological Resources, and the Mitigation Monitoring and Reporting Program, for further information.

The Commenter's opinion regarding housing is noted, but the County disagrees. The Project is designed with a balanced land use plan, as discussed in depth in Final EIR, response to

Comment F.8-20, which provides significant benefits including providing a beneficial jobs/housing balance, and helping to meet the County's overall housing need.

With regard to traffic, the EIR discloses that 146,154 daily trips would result from Project build-out; 48 percent internal and 52 percent external, and external trips would include trips on I-5. (Draft EIR, page 5.10-50) However, these trip estimates are conservative, as they do not take into account the trip reduction measures implemented by the Project would will encourage trips by walking, biking, and transit. With regard to air quality impacts of increased traffic, the EIR appropriately takes these impacts account into its air quality analysis, as is more thoroughly discussed in Draft EIR, Section 5.11, Air Resources, and Final EIR, responses to Comments F.3-33, F.8-189, F.8-197, and F.8-200. The Project has been situated and designed to promote regional "smart growth" planning principles established by the Southern California Association of Governments (SCAG) 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy and the County's Antelope Valley Area Plan (AVAP) for the purpose of sustainably accommodating regional growth projections in a manner that reduces criteria air pollutant and greenhouse gas emissions and promotes public health while protecting regional open space, Sensitive Ecological Areas and agricultural areas consistent with the AVAP's Rural Preservation Strategy. For further discussion, please see the Final EIR, response to Comment F.8-20. Indeed, the South Coast Air Quality Management District (SCAQMD) has reviewed the Centennial EIR and determined that the Project's Centennial Specific Plan "exemplifies [the County's] leadership in promoting sustainable communities development" and "will help reduce emissions from mobile sources, protect the public health from air pollution, and achieve healthful air in the [South Coast Air] Basin" (see Final EIR, Comment D.4-2).

With regard to the Project's fiscal impacts, the County disagrees with the Commenter's characterization of the Project. As discussed in the Draft EIR, such as in Section 5.16, Fire and Law Enforcement, and Section 5.17, Other Public Services, the Project is responsible for providing infrastructure and services and would not create negative fiscal impacts on surrounding communities.

From: Kathy Davis <kdavis61@verizon.net>
Sent: Sunday, October 14, 2018 6:48 PM
To: DRP LDCC <zoningldcc@planning.lacounty.gov>
Subject: Centennial Specific Plan

I am writing to oppose the Centennial Specific Plan for the following reasons:

- It would add huge amounts of traffic to our already clogged highways
- The location is dangerous: it is in a high fire danger zone and is sited on top of the San Andreas Fault.
- It will add to greenhouse gas emissions, air pollution, and strain our limited water supply
- The land is at a very dynamic area of ecoregional transitions in California
- Once we pave over this unique area, we will NEVER get back the finest native perennial grasslands, wildflower habitat, oak lands, and wildlife habitat for our children and grandchildren to enjoy

ADD-G.79-1

Stop this boondoggle.
Sincerely,
Kathy Davis

Response to Comment Letter ADD-G.79
Kathy Davis
October 14, 2018

Response to Comment ADD-G.79-1:

Thank you for your participation in this public process. The Commenter's opposition to the Project will be provided to the Board of Supervisors for consideration. This comment does not specifically address adequacy of the EIR, and no further response is required. However, the City notes that the EIR appropriately addresses all topics raised by the Commenter in compliance with CEQA requirements.

With regard to the addition of traffic to highways, the EIR considered Project impacts with improvements required to accommodate the full buildout of the Project under existing traffic plus Project buildout conditions, and cumulative traffic plus Project buildout conditions. The EIR identifies mitigation measures that would maintain acceptable level of service (LOS) standards at all applicable highway segments, intersections, and ramps, consistent with Alternative 2 of the NW SR-138 FEIR, as discussed more thoroughly in Final EIR, response to Comment F.7-15. Project impacts would be significant and unavoidable, however, if the improvements are not constructed by Caltrans because the County (as the Lead Agency) lacks jurisdiction and control over State highway facilities and cannot mandate the construction of improvements to these facilities. (Draft EIR, page 5.10-130; Final EIR, responses to Comments F.8-17, F.8-29.)

With regard to fire, the EIR thoroughly analyzes Project-related impacts and reduces impacts to a less than significant level with implementation of MM 3-9, including with regard to its location in Very High, High, and Medium Fire Hazard Severity Zones. The EIR appropriately evaluates the Project's fire safety impacts under two thresholds of significance. First, the Draft EIR considers whether the Project would expose people or structures to a significant risk of loss, injury or death involving fires because it is located (i) within a Very High Fire Hazard Severity Zone (VHFHSZ), (ii) within a high fire hazard area with inadequate access, (iii) within an area with inadequate water and pressure to meet fire flow standards, or (iv) within proximity to land uses that have the potential for dangerous fire hazard. Second, the Draft EIR considers whether the Project constitutes a potentially dangerous fire hazard. The Draft EIR determined that, with implementation of MM 3-9, Project impacts related to fire hazards would be less than significant under both applicable thresholds of significance. The Draft EIR concluded that Project impacts related to fire safety would be less than significant only after taking into consideration (i) Project site access, (ii) Project site water flows, (iii) Project site topography, (iv) Project site vegetative cover, (v) existing and proposed regulatory controls, (vi) existing mutual aid agreements between federal, state, and local fire safety service providers, and (vii) Project improvements and mitigation measures related to landscaping and vegetation management, building construction, circulation, public utilities, and fire protection services, including but not limited to MM 3-9. For further discussion of fire impacts, see Draft EIR, Section 5.3, and Final EIR, response to Comment A.2-6.

With regard to fault-related impacts, the EIR thoroughly and appropriately analyzes Project-related impacts due to fault location. First, it should be noted that the risk for earthquake shaking throughout Southern California is essentially the same, with a reduced risk along the southeastern portion of the State, so the nearness of one or more active faults does not have a direct correlation to risk of a seismic event and the magnitude of the event in a certain area. With regard to the Project site specifically, due to the proximity of both the San Andreas Fault and Garlock Fault to the Project site, a fault research company called Earth Consultants International (ECI) conducted a detailed fault investigation on the Project site and evaluated hazards as a result of fault locations in relation to the Project site and planned development areas. See Draft EIR, Appendix 5.1-A. While earthquakes that may occur along the San Andreas Fault Rift Zone are potential generators of significant ground accelerations at the site, foundation systems must be designed to withstand these accelerations, and secondary impacts such as liquefaction may be mitigated by remedial grazing, structural design and foundations or ground improvement techniques; active fault zones can also be mitigated against by implementing setback zones from Alquist-Priolo Earthquake Fault Zones. Accordingly, as shown on Draft EIR Exhibit 5.1-2, the Project has been designed to avoid development in areas near this zone. Draft EIR, Section 5.1, Geotechnical, page 5.1-16. The Project shall incorporate all applicable geotechnical recommendations identified in the geotechnical documents previously prepared for the Project, and implementation of these requirements would ensure impacts would be less than significant. For further discussion regarding seismic impacts and faults, see Final EIR, responses to Comments F.8-206 to F.8-210.

With regard to greenhouse gas emissions, the EIR thoroughly analyzes Project impacts and identifies appropriate mitigation to ensure impacts are reduced to a less than significant level to the greatest extent feasible. As discussed in Final EIR, response to Comment F.8-79, the Project's GHG impacts from these sources were fully disclosed and analyzed in Section 5.21 of the Draft EIR. Moreover, the Draft EIR includes mitigation measures which require compliance with a non-exclusive list of laws and regulations requiring GHG reductions in equipment, activities, facilities and services associated with the project (MM 21-20) The Draft EIR also includes 45 additional mitigation measures to reduce GHG emissions from project operations and/or construction activities (MMs 10-1, 10-25, 10-26, 11-1 through 11-7, 13-6, 14-1, 17-9, 17-10, 18-1, 18-2, 19-1 through 19-5, 20-2.1, 20-2.2, 20-3.1 through 20-3.3, and 21-1 through 21-19). In addition, the Specific Plan includes additional commitments to sustainable design and operational practices which minimize GHG emissions, as detailed in Final EIR, response to Comment F.8-204, and mitigation measures have been revised in response to comments on the Draft EIR to further reduce the Project's GHG emissions. See revised and added mitigation measures as set forth in Final EIR, responses to Comments F.8-95, F.8-204, F.2-2, F.2-5, F.3-29, F.3A-46, and F.8-189. However, climate change is a global phenomenon and the significance of greenhouse gas emissions is inherently cumulative in nature. Moreover, the County of Los Angeles has no jurisdictional control or responsibility for GHG reductions in other parts of California (and certainly not in the context of global action), which all contribute to climate change. Although many other agencies with the necessary jurisdiction are currently taking action to reduce GHG emissions, the County cannot assure that these measures would ultimately be implemented by such agencies or

sufficient to address climate change given its jurisdictional limitations. Therefore, the Draft EIR conservatively determined that the Project's incremental contribution to the global GHG emissions inventory would be considered cumulatively considerable and that this cumulative impact would be significant and unavoidable, even though the Project satisfies several "pathways to compliance" identified by the *California Supreme Court in Center for Biological Diversity v. Department of Fish and Wildlife* (2015) 62 Cal.4th 204.

With regard to air quality, the EIR thoroughly analyzes air quality and related health impacts of the Project and identifies appropriate mitigation to ensure impacts are reduced to a less than significant level to the greatest extent feasible. Project related air pollutant emissions were evaluated both in terms of contributions to regional air quality and localized impacts to uses proximate to the Project site. The Draft EIR disclosed that there would be significant and unavoidable air quality impacts related to construction emissions in the jurisdiction of the AVAQMD as well as the SCAQMD; Long-term operational emissions were also found to exceed the AVAQMD and SCAQMD thresholds of significance for regional emissions. (Draft EIR, page 5.11-1) However, it should be noted that the South Coast Air Quality Management District (SCAQMD) has reviewed the Centennial EIR and determined that the Project's Centennial Specific Plan "exemplifies [the County's] leadership in promoting sustainable communities development" and "will help reduce emissions from mobile sources, protect the public health from air pollution, and achieve healthful air in the [South Coast Air] Basin" (see Final EIR, Comment D.4-2).

With regard to water supply, after thorough analysis, the EIR appropriately concludes that Project water supplies will sustainably meet buildout potable and recycled water demands and would in fact maintain an average annual reserve supply in the two Project water banking facilities of more than 79,000 acre-feet after buildout has been achieved. This surplus would persist over time based on an 82-year hydrologic period of record, including single-dry and multiple-dry years, and taking account of climate change impacts. Please see Draft EIR, Section 5.18 Water Resources, Response to Testimony RPC-76, and responses to Comments E.1-5, F.3-4 through F.3-9, F.3A-6, F.3A-9, F.8-213, F.8-214, and F.8-220 for further discussion.

With regard to the Commenter's assertion that resources unique to Tejon Ranch will be lost, this is incorrect. The Project region is an important ecological region, and the proposed 43,080-acre mitigation preserve system contains all major habitat types affected by the Project, as well as particular individual biological resource values. The biological value of the proposed preserve system is further enhanced by its continuity with other open space areas. While it is acknowledged that the Project site occurs within this important ecozone, vast swaths of biologically rich land are preserved through the Project's mitigation process. With regard to plant preservation and impacts, including grasslands and oaks, please see Response to Testimony RPC-12; Final EIR, responses to Comments F.8-128 to F.8-131 (plants); Final EIR, responses to Comments B.4-17, B.4-43, B.4-63, F.7-22, F.8-124, F.8-125, F.8-127, F.8-128, and F.8-131 (grasslands and wildflowers); and Final EIR responses to Comments A.2-7, B.4-50, B.4-41, and F.8-132 through F.8-125 (oaks and oak woodlands).

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From: mark90039@everyactioncustom.com on behalf of MARK WALDNER <mark90039@everyactioncustom.com>
Sent: Tuesday, October 23, 2018 9:16 AM
To: Jodie Sackett
Subject: Please Say No to the Centennial Development

Follow Up Flag: Follow up
Flag Status: Completed

Dear Jodie Sackett,

Please help preserve wild space and do not approve this project. There are so many reasons to not move forward with the Centennial development. Please act for the citizens and wildlife of L.A. County. ADD-G.80-1

Sincerely,
MARK WALDNER
3531 Greensward Rd Los Angeles, CA 90039-2110 mark90039@gmail.com

Response to Comment Letter ADD-G.80
Mark Waldner
October 23, 2018

Response to Comment ADD-G.80-1:

Thank you for your participation in this public process. The Commenter's opposition to the Project will be provided to the Board of Supervisors for consideration. The County notes that the Project site cannot properly be considered "wild" because it has been primarily used for livestock grazing for more than 150 years, while approximately 1,000 acres in the eastern portion of the site have been cultivated as 5 separate pivot fields. (Draft EIR, page 3-9) Further, the EIR thoroughly evaluates the Project site with regard to its ecological value and Project-related impacts on biological resources, and mitigates impacts with enforceable, feasible mitigation measures. Please see Draft EIR, Section 5.7, Biological Resources, and the Mitigation Monitoring and Reporting Program, for further information. Project mitigation would result in improved functions and values of many biological resources, in addition to preservation in perpetuity, within the 39,000-acre Centennial Mitigation Preserve as described in PDF 7-1 on page 5.7-135 of the Draft EIR. Further, the project Applicant voluntarily agreed to permanently preserve 90 percent of the Ranch determined to be the most ecologically important, and limit Ranch development to the less than 10 percent of the Ranch determined to be developable without compromising biological integrity and biological values. This comment does not specifically address adequacy of the EIR, and no further response is required.

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From: timmcmartinez@everyactioncustom.com on behalf of Timothy Martinez <timmcmartinez@everyactioncustom.com>
Sent: Tuesday, October 23, 2018 8:04 AM
To: Jodie Sackett
Subject: No to Centennial

Dear Jodie Sackett,

Centennial is an example of the worst type of urban sprawl, which should be a relic of the past. It would move more resources away from the city center, while destroying native habitat in the most biodiverse part of the United States -- California. ADD-G.81-1

How can you approve a new city when LA County has already experienced such water shortages? How can you build more houses in a fire prone area?

Any Supervisor who favors this project has committed one of the worst mistakes for the future of our region, and should not be supported. Such a vote would mean you are actively dooming LA County to become unlivable in the face of drought, fire and climate change.

I urge you, please do whatever is in your power to push for this area to become a State Park, or otherwise protected land. People in LA County's growing cities need more public transportation, walkable communities, and natural open lands for respite in our increasingly urban world.

Please help preserve these lands for the future LA County residents, and for our unique wildlife and biodiversity in our State.

Sincerely,
Timothy Martinez
1404 Chamberlain Rd Pasadena, CA 91103-2312 timmcmartinez@yahoo.com

Response to Comment Letter ADD-G.81
Timothy Martinez
October 23, 2018

Response to Comment ADD-G.81-1:

Thank you for your participation in this public process. The Commenter's opposition to the Project will be provided to the Board of Supervisors for consideration. With regard to the Commenter's assertion that the Project constitutes "urban sprawl," please see Final EIR, response to Comment F.8-20. With regard to habitat destruction, although there is high biological value on portions of the Project site, much of the site has been impacted by non-native, noxious weeds such as shortpod mustard (*Hirschfeldia incana*). (Draft EIR, page 5.7-159) Similarly, riparian areas are degraded in most of the low-lying drainages. Consequently, biological diversity is less than would otherwise be expected in many less degraded areas. However, native grasslands occur in a patchy distribution throughout large portions of the site which may be attributed to the grazing, which has potentially minimized non-native growth to a level sufficient to allow persistence of native perennial bunch grasses, as described on pages 5.7-42 through 5.7-47 of the Draft EIR. Project implementation would include mitigation actions described in Draft EIR Section 5.7.7, resulting in improved functions and values of many of these resources, in addition to preservation in perpetuity, within the 39,000-acre Centennial Mitigation Preserve as described in PDF 7-1 on page 5.7-135 of the Draft EIR. The Project has been designed to include green space connections between undeveloped open space areas where feasible resulting in increased mobility for species. The Project only fragments the natural open space areas within the development footprint, and these remaining pockets of open space/parkland within the footprint are not essential for the persistence of regional native wildlife populations. On the other hand, the Mitigation Preserve provides for a very large degree of connectivity and prevents future fragmentation through long-term dedication. The Project's impact on wildlife movement due to changes in mobility and habitat fragmentation is therefore considered less than significant. (Draft EIR, page 5.7-166)

With regard to the Commenter's assertion that resources unique to Tejon Ranch will be lost, this is incorrect. The Project region is an important ecological region, and the proposed 43,080-acre mitigation preserve system contains all major habitat types affected by the Project, as well as particular individual biological resource values. The biological value of the proposed preserve system is further enhanced by its continuity with other open space areas. While it is acknowledged that the Project site occurs within this important ecozone, vast swaths of biologically rich land are permanently preserved through the Project's design and mitigation measures.

With regard to water supply, after thorough analysis, the EIR appropriately concludes that Project water supplies will sustainably meet buildout potable and recycled water demands and would in fact maintain an average annual reserve supply in the two Project water banking facilities of more than 79,000 acre-feet after buildout has been achieved. This surplus would persist over time based on an 82-year hydrologic period of record, including

single-dry and multiple-dry years, and taking account of climate change impacts. Please see Draft EIR, Section 5.18 Water Resources, Response to Testimony RPC-76, and responses to Comments E.1-5, F.3-4 through F.3-9, F.3A-6, F.3A-9, F.8-213, F.8-214, and F.8-220 for further discussion.

With regard to fire risk, the EIR thoroughly analyzes Project-related impacts and reduces impacts to a less than significant level with implementation of MM 3-9, including with regard to its location in Very High, High, and Medium Fire Hazard Severity Zones. The EIR appropriately evaluates the Project's fire safety impacts under two thresholds of significance. First, the Draft EIR considers whether the Project would expose people or structures to a significant risk of loss, injury or death involving fires because it is located (i) within a Very High Fire Hazard Severity Zone (VHFHSZ), (ii) within a high fire hazard area with inadequate access, (iii) within an area with inadequate water and pressure to meet fire flow standards, or (iv) within proximity to land uses that have the potential for dangerous fire hazard. Second, the Draft EIR considers whether the Project constitutes a potentially dangerous fire hazard. The Draft EIR determined that, with implementation of MM 3-9, Project impacts related to fire hazards would be less than significant under both applicable thresholds of significance. The Draft EIR concluded that Project impacts related to fire safety would be less than significant only after taking into consideration (i) Project site access, (ii) Project site water flows, (iii) Project site topography, (iv) Project site vegetative cover, (v) existing and proposed regulatory controls, (vi) existing mutual aid agreements between federal, state, and local fire safety service providers, and (vii) Project improvements and mitigation measures related to landscaping and vegetation management, building construction, circulation, public utilities, and fire protection services, including but not limited to MM 3-9. For further discussion of fire impacts, see Draft EIR, Section 5.3, and Final EIR, response to Comment A.2-6.

With regard to the Commenter's opinion that the entire Project site should be preserved is noted and will be provided to the Board of Supervisors for consideration. The County notes that the Project has been sited and designed to promote regional "smart growth" planning principles established by the Southern California Association of Governments' (SCAG) 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy and the County's Antelope Valley Area Plan (AVAP) for the purpose of accommodating regional growth projections in a sustainable manner that reduces criteria air pollutant and greenhouse gas emissions and promotes public health while protecting regional open space, Sensitive Ecological Areas and agricultural areas consistent with the AVAP's Rural Preservation Strategy. See Final EIR, response to Comment F.8-20 for further discussion.

Dear Jodie Sackett,

Centennial is a terrible deal for L.A. County. Centennial would be located in a "high" and "very high" fire hazard area subject to intense winds. Locating thousands of people in this fire-prone area will certainly lead to more human-caused wildfires, scorched homes and loss of life.

Centennial will not help address the county's housing shortage. Building a new city 65 miles from downtown LA will isolate potential residents from economic, educational and cultural opportunities. Instead, Centennial would require the construction of a new freeway at an initial cost of $830 million, which would divert scarce funds away from transit projects that make our existing communities more livable and sustainable.

Centennial would add tens of thousands of new cars each day onto Highway 5, leading to further gridlock in Santa Clarita and the San Fernando Valley. Thousands of long-distance car trips will lead to more cancer- and asthma-causing air pollution, worsening the county's public health.

Your decision on Centennial is perhaps the most far-reaching decision you will ever make as a supervisor. Please, don't approve Centennial. It would reward Wall Street speculators while leaving county residents stuck with the bill for more freeways, more wildfires, more traffic, and more air pollution.

ADD-G.82-1

Sincerely,

Response to Comment Letter ADD-G.82
Form Letter 15
Various Dates

Response to Comment ADD-G.82-1:

A form letter was prepared by an unknown source and was made available to the public for submittal to the County via email. These form letters appear as Appendix A-15 to this document. The Commenters' opposition to the Project will be provided to the Board of Supervisors for consideration. The following are responses to the form letter, including as personalized by some individual commenters.

With regard to fire impacts, the EIR thoroughly analyzes Project-related impacts and reduces impacts to a less than significant level with implementation of MM 3-9, including with regard to its location in Very High, High, and Medium Fire Hazard Severity Zones. The EIR appropriately evaluates the Project's fire safety impacts under two thresholds of significance. First, the Draft EIR considers whether the Project would expose people or structures to a significant risk of loss, injury or death involving fires because it is located (i) within a Very High Fire Hazard Severity Zone (VHFHSZ), (ii) within a high fire hazard area with inadequate access, (iii) within an area with inadequate water and pressure to meet fire flow standards, or (iv) within proximity to land uses that have the potential for dangerous fire hazard. Second, the Draft EIR considers whether the Project constitutes a potentially dangerous fire hazard. The Draft EIR determined that, with implementation of MM 3-9, Project impacts related to fire hazards would be less than significant under both applicable thresholds of significance. The Draft EIR concluded that Project impacts related to fire safety would be less than significant only after taking into consideration (i) Project site access, (ii) Project site water flows, (iii) Project site topography, (iv) Project site vegetative cover, (v) existing and proposed regulatory controls, (vi) existing mutual aid agreements between federal, state, and local fire safety service providers, and (vii) Project improvements and mitigation measures related to landscaping and vegetation management, building construction, circulation, public utilities, and fire protection services, including but not limited to MM 3-9. For further discussion of fire impacts, see Draft EIR, Section 5.3, and Final EIR, response to Comment A.2-6.

The Commenters' opinion regarding housing is noted, but the County disagrees. The Project is designed with a balanced land use plan, as discussed in depth in Final EIR, response to Comment F.8-20, which provides significant benefits including providing a beneficial jobs/housing balance, and helping to meet the County's overall housing need.

With regard to the assertion that the Project will require "a new freeway", the County assumes this is a reference to the Northwest 138 Corridor Improvement Project and notes that the assertion is incorrect. The Northwest 138 Corridor Improvement Project significantly predates the Project. The North County Combined Highway Corridors Study (NCCHCS), completed in 2004, identified SR-138 as a bypass corridor and recommend its expansion to a 6-lane freeway between Interstate 5 and State Route 14 to accommodate

traffic demand that the NCCHS projected would double by 2025.[3415] Four years later, in 2008, the voters approved Measure R, the Los Angeles County half-cent sales tax transportation funding initiative.[3416] Measure R allocated $25 million for approval and environmental documentation of the Northwest 138 Corridor Improvement Project to be used between 2012 and 2018.[3417] The Project's application was not deemed complete by the County until 2008 and the AVAP was not adopted until 2015, well after preparation of the NCCHCS and the Measure R campaign. The Northwest 138 Corridor Improvement Project is a long planned public works project needed to accommodate regional growth projections for areas well beyond the Project site. For further discussion of the Project's relationship to the Northwest 138 Corridor Improvement Project, please see response to Comment ADD-F.10-5.

With regard to traffic more generally, as the Commenters note, the EIR discloses that 146,154 daily trips would result from Project build-out; 48 percent internal and 52 percent external, and external trips would include trips on I-5. (Draft EIR, page 5.10-50) However, these trip estimates are conservative, as they do not take into account the trip reduction measures implemented by the Project would will encourage trips by walking, biking, and transit. With regard to air quality impacts of increased traffic, the EIR appropriately takes these impacts account into its air quality analysis, as is more thoroughly discussed in Draft EIR, Section 5.11, Air Resources, and Final EIR, responses to Comments F.3-33, F.8-189, F.8-197, and F.8-200. The Project has been situated and designed to promote regional "smart growth" planning principles established by the Southern California Association of Governments (SCAG) 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy and the County's Antelope Valley Area Plan (AVAP) for the purpose of sustainably accommodating regional growth projections in a manner that reduces criteria air pollutant and greenhouse gas emissions and promotes public health while protecting regional open space, Sensitive Ecological Areas and agricultural areas consistent with the AVAP's Rural Preservation Strategy. For further discussion, please see the Final EIR, response to Comment F.8-20. Indeed, the South Coast Air Quality Management District (SCAQMD) has reviewed the Centennial EIR and determined that the Project's Centennial Specific Plan "exemplifies [the County's] leadership in promoting sustainable communities development" and "will help reduce emissions from mobile sources, protect the public health from air pollution, and achieve healthful air in the [South Coast Air] Basin" (see Final EIR, Comment D.4-2).

With regard to fiscal impacts, the County disagrees with the Commenters' characterization of the Project. As discussed in the Draft EIR, such as in Section 5.16, Fire and Law Enforcement, and Section 5.17, Other Public Services, the Project is responsible for providing infrastructure and services and would not create negative fiscal impacts on surrounding communities.

With regard to Matt Pakucko's email, the County notes that as the lead agency, it has complied with CEQA requirements, and has maintained an appropriate and independent relationship with the Project Applicant. The same is true with regard to SoCalGas, which

[3415] Caltrans 2017b, p. 8
[3416] *Id.,* p 1
[3417] *Ibid.*

provides natural gas service to much of the Southern California region, including the Project site; SoCalGas is regulated by the CPUC and is required to provide services to existing and proposed future development in its service area. (Draft EIR, page 5.20-16)

With regard to MaryEllen Schoeman's email, the Commenter's opinion about the appropriate location for affordable housing is noted and will be provided to the Board of Supervisors. However, the County disagrees with the Commenter's characterization of the Project's approach to housing. The Project is designed with a balanced land use plan, as discussed in depth in Final EIR, response to Comment F.8-20, which provides significant benefits including providing a beneficial jobs/housing balance, and helping to meet the County's overall housing need. Further, the Project site cannot appropriately be called "wilderness", because it has been primarily used for livestock grazing for more than 150 years, while approximately 1,000 acres in the eastern portion of the site have been cultivated as 5 separate pivot fields. (Draft EIR, page 3-9) With regard to San Joaquin kit fox, this species in not present on the Project site and the EIR therefore appropriately concludes that the Project site would have no impact on this species. See Draft EIR, Section 5.7, Biological Resources, for further information.

With regard to Kiernan Scanlon's email, the Commenter's preference for revitalization of existing communities will be provided to the Board of Supervisors. Please see response to Comment F.8-20 for additional discussion regarding sustainable levels of infill development in the region. This comment does not address the adequacy of the EIR, and no further response is required.

With regard to Ruth Abigail's opinion that the entire Project site should be preserved, this is noted and will be provided to the Board of Supervisors for consideration. The County notes that the Project has been sited and designed to promote regional "smart growth" planning principles established by the Southern California Association of Governments' (SCAG) 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy and the County's Antelope Valley Area Plan (AVAP) for the purpose of accommodating regional growth projections in a sustainable manner that reduces criteria air pollutant and greenhouse gas emissions and promotes public health while protecting regional open space, Sensitive Ecological Areas and agricultural areas consistent with the AVAP's Rural Preservation Strategy. See Final EIR, response to Comment F.8-20 for further discussion.

With regard to the information Jack Eidt presents about his experience and background, this information is noted and will be provided to the Board of Supervisors for consideration.

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4.0 CLARIFICATIONS AND REVISIONS TO THE EIR

4.1 CLARIFICATIONS AND REVISIONS TO THE DRAFT EIR

All additions or corrections to the Draft Environmental Impact Report (EIR) text, tables, and figures generated either from responses to comments or independently by the County, are stated in this section of the Consolidated Final EIR. These Draft EIR revisions are provided to clarify, refine, and provide supplemental information for the Draft EIR, and are incorporated as part of this Consolidated Final EIR for consideration by the Los Angeles County Board of Supervisors (Board of Supervisors). Changes include corrections or clarifications to the text and tables of the original Draft EIR, and changes to clarify the analysis in the Draft EIR based upon the information and concerns raised by the public and the Regional Planning Commission.

Unless otherwise indicated below, edits are as identified in the Final EIR, and no further edits have been made to the text subsequent to publication of the Final EIR. However, where text was originally revised in the Final EIR published in May 2018, and subsequently *further* revised, this Section 4.1 specifically identifies that a subsequent edit has been made, and the subsequent edit immediately follows the first one. The only changes to the Draft EIR since the publication of the Final EIR in May 2018 have been made to select mitigation measures (MMs) and corresponding project design features (PDFs). The clarifications and revisions to the Draft EIR text, tables, and figures have not been published in their entirety as a single revised Draft EIR document; rather, all clarifications and revisions to the Draft EIR are identified herein.

The clarifications and revisions to the Draft EIR contained in this Section 4.1 are in the same order as the information appears in the Draft EIR. Changes in text are signified by strikeouts (~~strikeouts~~) where text has been removed and by double underlining (<u>underline</u>) where text has been added. The applicable page numbers from the Draft EIR are also provided where necessary for easy reference. Where further changes have been made subsequent to publication of the Final EIR, all changes previously made in the Final EIR have been accepted and are *not* shown in double underline/strikeout format, and only changes made *after* publication of the Final EIR are shown in double underline/strikethrough.

For example, MM 3-11, which was newly identified in the Final EIR, appears in the Final EIR in double underline as follows:

MM 3-11 <u>The Project Applicant/Developer shall be responsible for the creation of a website on the proposed Centennial community internet that provides public information regarding dust-generating activities, to be maintained and updated as appropriate throughout the Centennial Project construction period. The purpose of the website would be to enable interested parties both on- and off-site to easily access</u>

information relevant to potential Valley Fever risk. The Project Applicant/Developer shall also be responsible for the preparation and one-time distribution to surrounding communities and to all schools located in the communities of Gorman, Lebec, and Frazier Park of a notice describing the availability of this website to provide awareness of the site and its contents.

Since publication of the Final EIR, further revisions have been made to MM 3-11. In the text identifying the subsequent edit, text previously added in the Final EIR has been accepted in this document, and only the further revisions made after publication of the Final EIR appear in double underline/strikethrough, as follows:

MM 3-11 The Project Applicant/Developer shall be responsible for the creation of a website on the proposed Centennial community internet that provides public information in both Spanish and English regarding dust-generating activities, to be maintained and updated as appropriate throughout the Centennial Project construction period. The purpose of the website would be to enable interested parties both on- and off-site to easily access information relevant to potential Valley Fever risk, including information relevant to potential Valley Fever risks to pets, horses, and other animals that may be present at or around the Project site during construction activities. The Project Applicant/Developer shall also be responsible for the preparation and one-time distribution to surrounding communities and to all schools located in the communities of Gorman, Lebec, and Frazier Park of a notice describing the availability of this website to provide awareness of the site and its contents.

As presented in Section 2.0, Responses to Comments, and as further discussed in Section 1.4 of this Consolidated Final EIR, the information included in these clarifications and revisions to the Draft EIR does not constitute substantial new information that requires recirculation of the Draft EIR pursuant to Section 15088.5 of the State CEQA Guidelines. Recirculation of the Draft EIR is not required because the new information added to the EIR through these modifications clarifies or amplifies information already provided or makes insignificant modifications to the already adequate Draft EIR.

Global

All references to the "Centennial Transportation Improvement Program" or "CTIP" are hereby revised throughout the Draft EIR as follows:

~~Centennial Transportation Improvement Program (CTIP)~~ Traffic Mitigation Agreement

Several mitigation measures in Section 5.10, Traffic, Access, and Circulation and in other sections of the Draft EIR were edited, added, and deleted in response to comments on the EIR. As a result, the numbering of certain mitigation measures changed between the publishing of the Draft and Final EIRs. All references to the following mitigation measures are hereby revised throughout the Draft EIR as follows (the previous Draft EIR MM number is on the left, and the revised, Final EIR MM number is on the right):

Draft EIR MM #	Final EIR MM #	Draft EIR MM #	Final EIR MM #	Draft EIR MM #	Final EIR MM #
10-10	DELETED	10-22	10-19	10-34	10-30
10-11	10-10	10-23	10-20	10-35	10-31
10-12	10-11	10-24	10-22	10-36	10-32
10-13	10-12	10-25	10-23	10-37	10-33
10-14	10-13	10-26	10-24	10-38	10-34
10-15	DELETED	10-27	DELETED	10-39	10-35
10-16	10-14	10-28	DELETED	10-41	10-37
10-17	DELETED	10-30	10-26	10-42	10-38
10-18	10-15	10-31	10-27	10-43	10-39
10-19	10-16	10-32	10-28	10-44	10-40
10-20	10-17	10-33	10-29	10-45	10-41
10-21	10-18	-	-	-	-

Section 1 – Executive Summary

The first sentence under Fire Services on page 1-23 is hereby revised as follows:

> Fire services and emergency response for fire incidents during the initial development phases of the Project would be provided from Fire Station 77, located at 46833 Peace Valley Road in Gorman, which is currently staffed with a three-person <u>assessment</u> engine company<u>, which is an engine company with some limited paramedic capabilities</u>.

Table 1-2, Centennial Specific Plan Mitigation Summary, on pages 1-37 to 1-95 is hereby revised as follows:

TABLE 1-2
CENTENNIAL SPECIFIC PLAN MITIGATION SUMMARY

#	Environmental Factor	Mitigation
5.2	**Hydrology and Flood**	**MM 2-1** The Project shall implement hydromodification control Best Management Practices (BMPs) that will meet the requirements of Section 8 – Hydromodification Impacts of the County LID Standards Manual, as confirmed by the County based on a Drainage System Engineering and Planning Report to be submitted with each Project tract map application. This Drainage System Engineering and Planning Report shall describe applicable hydromodification control BMPs and utilize approved Los Angeles County methods to demonstrate compliance with the County LID Standards Manual.
5.2	**Hydrology and Flood**	**MM 2-2** The Project shall implement hydrology and flood-control BMPs that will achieve the following hydrology and flood performance standards: *All project water conveyance facilities must be designed to provide capital flood protection. BMPs must be implemented to ensure that, for the capital storm event, there is no increase in peak discharge rates and no increase in runoff volume offsite compared with peak discharge rates and runoff volumes under existing, pre-development conditions. Compliance with the hydrology and flood performance standard shall be demonstrated by using a methodology approved Los Angeles County Department of Public Works for comparing project site pre- and post-development peak discharge rates and runoff volumes.* Compliance with the hydrology and flood performance standards shall be further confirmed by the County, based on a Drainage System Engineering and Planning Report submitted with each Project tract map application. The Drainage System Engineering and Planning Report shall describe applicable hydrology and flood-control BMPs and utilize approved Los Angeles County methodologies to demonstrate compliance with the hydrology and flood performance standards.
5.2	**Hydrology and Flood**	***The following edit was identified subsequent to publication of the Final EIR in May 2018 and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors.*** **MM 2-2** The Project shall implement hydrology and flood-control BMPs that will achieve the following hydrology and flood performance standards: *All project water conveyance facilities must be designed to provide capital flood protection. <u>The "capital flood" is the runoff produced by a 50-year frequency design storm falling on a saturated watershed (i.e. soil moisture at field capacity). A 50-year frequency design storm has a probability of 1/50 of being equaled or exceeded in any year.</u> BMPs must be implemented to ensure that, for the capital storm event, there is no increase in peak discharge rates and no increase in runoff volume offsite compared with peak discharge rates and runoff volumes under existing, pre-development conditions. Compliance with the hydrology and flood performance standard shall be demonstrated by using a methodology approved Los Angeles County Department of Public Works for comparing project site pre- and post-development peak discharge rates and runoff volumes.*

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#	Environmental Factor	Mitigation
		Compliance with the hydrology and flood performance standards shall be further confirmed by the County, based on a Drainage System Engineering and Planning Report submitted with each Project tract map application. The Drainage System Engineering and Planning Report shall describe applicable hydrology and flood-control BMPs and utilize approved Los Angeles County methodologies to demonstrate compliance with the hydrology and flood performance standards.
5.2	**Hydrology and Flood**	**MM 2-3** Each Tentative Map shall depict the 100-year floodplain mapped by the Federal Emergency Management Agency (FEMA). The placement of habitable residential, commercial, school and institutional buildings shall be precluded within any mapped 100-year floodplain. All applications for Project tract maps that would locate any structures within a mapped 100-year floodplain must include an engineering report that provides a detailed description of the floodplain boundaries and demonstrates that as-built conditions comply with all applicable FEMA requirements. If required, a conditional letter of map revision (CLOMR) shall be obtained from FEMA prior to construction within a mapped 100-year floodplain.
5.2	**Hydrology and Flood**	**MM 2-4** The Project shall comply with the California General Construction Permit issued by the State Water Resources Control Board (CAR000002, Order 2009-0009-DWQ as amended by Order 2010-0014-DWQ and Order 2012-0006-DWQ) during all Project construction activity that meets or exceeds the applicable levels of land disturbance and other applicable coverage criteria in the California General Construction Permit notwithstanding the potential absence or presence of Waters of the United States in any Project construction location.
5.2	**Hydrology and Flood**	**MM 2-5** The Project shall implement maintenance measures in consultation with a qualified biologist that encourage stabilized native grasses and/or deep rooting plants to minimize sediment transport within applicable post-construction facilities that incorporated Best Management Practices for hydrology and flood control facilities.
5.3	**Hazards and Fire Safety**	**MM 3-1** The Project Applicant/Developer shall employ a Dust-Control Supervisor who will be on the site within 30 minutes of the start of work taking place each morning; will have the authority to expeditiously employ sufficient dust mitigation measures to ensure compliance with all Antelope Valley Air Quality Management District (AVAQMD) Rule 403 and South Coast Air Quality Management District (SCAQMD) Rule 403 requirements; and will have completed the SCAQMD Fugitive Dust Control Class and has been issued a valid Certificate of Completion for the class. Contact information for the Project's Dust Control Supervisor shall be posted on-site to ensure that the public has a means of providing complaints regarding fugitive dust. The Dust Control Supervisor shall be responsible for tracking complaints, conducting corrective action, as necessary, and for maintaining an up-to-date log of complaints and responses for periodic County review.
5.3	**Hazards and Fire Safety**	**MM 3-2** To aid in the prevention of Valley Fever among construction crews on the Project site, the following shall be implemented by the Construction Contractor during all construction activities: • Have Tyvek™ coveralls/suits available in a range of sizes for construction worker use upon request. If used, require the worker to remove the Tyvek™ suit at the work site at the end of the day.

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#	Environmental Factor	Mitigation
		• Hire crews from Los Angeles and/or Kern County populations, or other areas where Valley Fever is endemic, where possible, since it is more likely that they have been previously exposed to the fungus and are therefore immune. • Prior to Project construction initiation, and for any personnel additions after initial Project construction initiation, the following California Department of Public Health (CDPH) materials on Valley Fever (or the most updated materials applicable to Los Angeles County) shall be distributed to worksite supervisors: o CDPH pamphlet entitled "Preventing Work-Related Coccidioidomycosis (Valley Fever)" available at: http://www.cdph.ca.gov/programs/hesis/Documents/CocciFact.pdf. (CDPH 2013a) • Prior to Project construction initiation, and for any personnel additions after initial Project construction initiation, the following CDPH materials on Valley Fever (or the most updated materials applicable to Los Angeles County) shall be distributed to construction workers: o CDPH pamphlet entitled "Valley Fever Fact Sheet" available at: http://www.cdph.ca.gov/HealthInfo/discond/Documents/VFGeneral.pdf. (CDPH 2013b) o CDPH pamphlet entitled "Hoja de datos de la Fiebre del Valle (Valley Fever Fact Sheet in Spanish)" available at: http://www.cdph.ca.gov/HealthInfo/discond/Documents/HojaDeDatosDeLaFiebreDelValle.pdf (CDPH 2013c). o CDPH pamphlet entitled "Fact Sheet Valley Fever (Valley Fever Fact Sheet in Tagalog)," available at: http://www.cdph.ca.gov/HealthInfo/discond/Documents/TagalogGeneralValleyFeverFactSheet.pdf (CDPH 2013d). • Require crews to use masks or respirators that are adequate to restrict inhalation of particulates during Project clearing, grading, and excavation operations in accordance with California Division of Occupational Safety and Health regulations. • During rough grading and construction, the access way into the Project site from adjoining paved roadways shall be paved or treated with environmentally safe dust-control agents.
5.3	**Hazards and Fire Safety**	***The following further edit was identified subsequent to publication of the Final EIR in May 2018 and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors.*** **MM 3-2** To aid in the prevention of Valley Fever among construction crews on the Project site, the following shall be implemented by the Construction Contractor during all construction activities: • Have Tyvek™ coveralls/suits available in a range of sizes for construction worker use upon request. If used, require the worker to remove the Tyvek™ suit at the work site at the end of the day.

TABLE 1-2
CENTENNIAL SPECIFIC PLAN MITIGATION SUMMARY

#	Environmental Factor	Mitigation
		• Hire crews from Los Angeles and/or Kern County populations, or other areas where Valley Fever is endemic, where possible, since it is more likely that they have been previously exposed to the fungus and are therefore immune. • Prior to Project construction initiation, and for any personnel additions after initial Project construction initiation, the following California Department of Public Health (CDPH) materials on Valley Fever (or the most updated materials applicable to Los Angeles County) shall be distributed to worksite supervisors: o CDPH pamphlet entitled "Preventing Work-Related Coccidioidomycosis (Valley Fever)" available at: http://www.cdph.ca.gov/programs/hesis/Documents/CocciFact.pdf. (CDPH 2013a) • Prior to Project construction initiation, and for any personnel additions after initial Project construction initiation, the following CDPH materials on Valley Fever (or the most updated materials applicable to Los Angeles County) shall be distributed to construction workers: o CDPH pamphlet entitled "Valley Fever Fact Sheet" available at: http://www.cdph.ca.gov/HealthInfo/discond/Documents/VFGeneral.pdf. (CDPH 2013b) o CDPH pamphlet entitled "Hoja de datos de la Fiebre del Valle (Valley Fever Fact Sheet in Spanish)" available at: http://www.cdph.ca.gov/HealthInfo/discond/Documents/HojaDeDatosDeLaFiebreDelValle.pdf (CDPH 2013c). o CDPH pamphlet entitled "Fact Sheet Valley Fever (Valley Fever Fact Sheet in Tagalog)," available at: http://www.cdph.ca.gov/HealthInfo/discond/Documents/TagalogGeneralValleyFeverFactSheet.pdf (CDPH 2013d). • During rough grading and construction, the access way into the Project site from adjoining paved roadways shall be paved or treated with environmentally safe dust-control agents. • Provide evidence to the Department of Public Health that the Project Applicant/Developer has developed a "Valley Fever Training Handout," training, and schedule of sessions for education to be provided to all construction personnel. All evidence of the training session materials, training handout(s) and training schedule shall be submitted to the Department of Public Health within 24 hours of the first training session. Multiple training sessions may be conducted if different work crews will come to the Project site for different stages of construction; however, all construction personnel shall be provided training prior to beginning work. The evidence submitted to the Department of Public Health regarding the "Valley Fever Training Handout" and training sessions shall include the following: o A sign-in sheet (to include the printed employee names, signature, and date) for all employees who attended the training session;

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		○ Distribution of a written flyer or brochure that includes educational information regarding the health effects of exposure to criteria pollutant emissions and Valley Fever (including the CDPH informational materials described in this mitigation measure); ○ Training on methods that may help prevent Valley Fever infection; and ○ Train employees how to use personal protective equipment, such as respiratory equipment, how to reduce exposure to pollutants, how to recognize symptoms of Valley Fever, and to promptly report any suspected systems to a work supervisor. Training shall also emphasize the benefits of wearing Tyvek suits in relation to Valley Fever exposure and explain that such protective clothing is available upon request. Proof that the demonstration is included in the training shall be submitted to the Department of Public Health. • Provide construction workers separate, clean eating areas equipped with hand-washing facilities. • Require crews to use masks or half-faced respirators equipped with a minimum N-95 protection factor and that are adequate to restrict inhalation of particulates during Project clearing, grading, and excavation operations in accordance with California Division of Occupational Safety and Health regulations. Respirator equipment shall be readily available and shall be provided to employees during work. • Require employees to be medically evaluated, fit-tested, and properly trained on the use of the required masks or respirators • Provide High-Efficiency Particulate Air (HEPA) filters for heavy equipment with factory enclosed cabs capable of accepting the filters. Require contractors utilizing applicable heavy equipment to furnish proof to the Department of Regional Planning of worker training on proper use of applicable heavy equipment cabs, such as turning on air conditioning prior to using the equipment. • Provide communication methods, such as two-way radios, for use in enclosed heavy equipment cabs. • Install equipment inspection stations at each construction equipment access/egress point. Examine construction vehicles and equipment or excess soil materials and clean, as necessary before equipment is moved off-site. • When possible, position construction workers upwind or crosswind when digging a trench or performing other soil-disturbing tasks. • Prohibit smoking at the worksite outside of designated smoking areas; designated smoking areas will be equipped with hand-washing facilities. • Post Valley Fever warnings at on-site construction areas and restrict access to such areas by visitors without adequate training and respiratory protection.

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#	Environmental Factor	Mitigation
		• Audit and enforce compliance with applicable California Occupational Safety and Health Administration health and safety standards on the job site.
5.3	**Hazards and Fire Safety**	**MM 3-3** The Project Applicant/Developer shall provide to each prospective property purchaser or tenant a notice and statement of acknowledgment that shall be executed (i.e., read and signed) by the prospective purchaser, lessee, or tenant that the property within Centennial may present a risk of exposure to Valley Fever spores during construction or other earth-moving activities. The form shall include strategies to reduce potential exposure to Valley Fever spores. The form and method of distribution of said notice and statement of acknowledgment shall be as approved by the County.
5.3	**Hazards and Fire Safety**	**MM 3-4** The Project Applicant/Developer shall coordinate with the California Department of Conservation, Division of Oil, Gas and Geological Resources (DOGGR) to facilitate re-abandonment of the two on-site historic dry oil wells in accordance with current DOGGR specifications. The Project Applicant/Developer shall present documentation to the County that it has complied with the DOGGR requirements for re-abandonment of the two on-site wells.
5.3	**Hazards and Fire Safety**	**MM 3-5** The Project Applicant/Developer shall provide documentation to the County that the abandoned mine shaft is permanently closed in accordance with applicable regulations, as directed by the California Department of Conservation Office of Mine Reclamation, to prevent future access and potential ground instability issues.
5.3	**Hazards and Fire Safety**	**MM 3-6** If unanticipated hazardous materials or waste is encountered during construction, all work in the immediate vicinity of the suspect hazardous material shall be halted and the applicable oversight agency(ies) shall be notified. The applicable agency(ies) are determined based on the type and extent of the material encountered, and may include the California Department of Toxic Substances Control (DTSC), the State Water Quality Control Board, and/or local agencies, such as the County of Los Angeles Fire Department. The Project Applicant/Developer shall coordinate with appropriate agency(ies) on the appropriate means to address the suspect hazardous material/waste. All environmental investigation and/or remediation shall be conducted under a Workplan approved by the primary oversight agency(ies) and construction in the affected area shall not proceed until clearance has been issued by the applicable agency(ies).
5.3	**Hazards and Fire Safety**	**MM 3-7** The Project Applicant/Developer shall prepare an Emergency Response Plan for the Project, which shall be updated as needed for each Tentative Map, and shall be submitted to the County for review and approval. The Project Applicant/Developer shall be responsible for distributing the current Emergency Response Plan to each purchaser or tenant of each property within Centennial, and shall distribute the Plan to all landowners through the Transportation Management Agency (TMA).
5.3	**Hazards and Fire Safety**	**MM 3-8** The Project Applicant/Developer shall prepare a Traffic Control Plan in accordance with the California Manual on Uniform Traffic Control Devices (MUTCD). The Traffic Control Plan shall be reviewed and approved by the California Department of Transportation (Caltrans), and all construction activities in the public right-of-way shall comply with the approved Traffic Control Plan to the satisfaction of Caltrans. Documentation of Caltrans approval shall be provided to the County for any Tentative Map involving construction within State Route 138 right-of-way.

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#	Environmental Factor	Mitigation
5.3	**Hazards and Fire Safety**	**MM 3-9** The Project Applicant/Developer shall prepare a Fuel Modification Plan demonstrating compliance with the County Fire Code Title 32 and shall provide all new residents and business owners with recorded Covenants, Conditions, and Restrictions (CC&Rs) or disclosure statements that identify the responsibilities for maintaining the fuel modification zone(s) on their property, as defined in the approved Fuel Modification Plan. The CC&Rs or disclosure statements prepared by the Project Applicant/Developer shall be submitted to the County to confirm that new property owners will be informed of their responsibilities for maintaining the fuel modification zone(s) on their property.
5.3	**Hazards and Fire Safety**	**MM 3-10** The Project Applicant/Developer shall be responsible for ensuring the destruction of the historic water well associated with the former homestead in the central portion of the site is completed in full compliance with the requirements of the California Department of Water Resources' Water Well Standards, including Chapter II, Part III, Section 23 (Requirements for Destroying Wells). The applicable Local Enforcement Agency for implementation of the DWR's Well Standards is the Los Angeles County Department of Health Services, Drinking Water Program (LACDHS). The Project Applicant/Developer shall present documentation that is has complied with the DWR Well Standards to the LACDHS.
5.3	**Hazards and Fire Safety**	**MM 3-11** The Project Applicant/Developer shall be responsible for the creation of a website on the proposed Centennial community internet that provides public information regarding dust-generating activities, to be maintained and updated as appropriate throughout the Centennial Project construction period. The purpose of the website would be to enable interested parties both on- and off-site to easily access information relevant to potential Valley Fever risk. The Project Applicant/Developer shall also be responsible for the preparation and one-time distribution to surrounding communities and to all schools located in the communities of Gorman, Lebec, and Frazier Park of a notice describing the availability of this website to provide awareness of the site and its contents.
5.3	**Hazards and Fire Safety**	***The following further edit was identified subsequent to publication of the Final EIR in May 2018 and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors.*** **MM 3-11** The Project Applicant/Developer shall be responsible for the creation of a website on the proposed Centennial community internet that provides public information in both English and Spanish regarding dust-generating activities, to be maintained and updated as appropriate throughout the Centennial Project construction period. The purpose of the website would be to enable interested parties both on- and off-site to easily access information relevant to potential Valley Fever risk, including information relevant to potential Valley Fever risks to pets, horses, and other animals that may be present at or around the Project site during construction activities. The Project Applicant/Developer shall also be responsible for the preparation and one-time distribution to surrounding communities and to all schools located in the communities of Gorman, Lebec, and Frazier Park of a notice describing the availability of this website to provide awareness of the site and its contents.

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#	Environmental Factor	Mitigation
5.4	**Water Quality**	**MM 4-1** The Project shall implement Low Impact Development (LID) and water quality control Best Management Practices (BMPs) that will achieve the following LID performance standard: *LID BMPs shall be selected and sized to retain the volume of storm water runoff produced from the higher of the 85th percentile or ¾ inch, 24-hour storm depth as determined from the Los Angeles County 85th Percentile 24-hr Rainfall Isohyetal Map (February 2004) (LID design volume). When it has been demonstrated that 100 percent of the LID design volume cannot be feasibly infiltrated within the Project, then the volume shall be harvested and reused. If that volume cannot be harvested and reused within 96 hours, then biofiltration shall be provided for 1.5 times the portion of the LID design volume that is not retained. Runoff from roadways shall be retained or biofiltered in retention or biofiltration BMPs sized to capture the design storm volume or flow, per the guidance in the U.S. Environmental Protection Agency's (USEPA's) Managing Wet Weather with Green Infrastructure: Green Streets. LID BMPs may be parcel-based or regional facilities.* Compliance with the LID performance standards shall be confirmed by the County based on a Drainage System Engineering and Planning Report to be submitted with each Tentative Map application. The Report shall describe applicable water quality control and LID BMPs and shall utilize approved Los Angeles County methodologies to demonstrate compliance with the LID performance standards. To the extent feasible, incorporate permeable pavement, groundcovers, and/or other measures to increase infiltration.
5.4	**Water Quality**	**MM 4-2** The Project shall implement integrated pest management (IPM) and landscaping best management practices (BMPs) consistent with the integrated pest management and pesticide and fertilizer application guidelines established by the University of California Division of Agriculture and Natural Resources Statewide Integrated Pest Management Program which are available online at http://www.ipm.ucdavis.edu/. The integrated pest management program will be provided to the County in association with the Landscape Plan submitted to the County with each tentative tract map. The IPM and landscaping BMPs shall be confirmed in a Landscaping Plan submitted to the County during the review and approval process for each tract map application. The BMPs shall include a Planting Plan that is consistent with the plant water use requirements of Section 3.~~3~~4 of the Centennial Specific Plan; with procedures for removing non- native vegetation and planting native vegetation; with fertilizer guidelines; and with the IPM approach for preventing or suppressing pest problems (i.e., insects and diseases). This shall be done through a combination of techniques including using pest-resistant plants; using biological controls; incorporating cultural practices; including habitat modification; and judiciously using pesticides. The IPM and landscaping BMPs shall, in addition to identifying IMP and landscaping BMP management and funding roles and responsibilities, monitoring, training, and timely IPM and BMP program review requirements to incorporate new technologies that may become available, address the following: • Pest identification. • Practices to prevent pest incidence and to reduce pest buildup. • Monitoring to examine vegetation and surrounding areas for pests to evaluate trends and to identify when controls are needed. • Establishment of action thresholds that trigger control actions.

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#	Environmental Factor	Mitigation
		• Pest-control methods (cultural, mechanical, environmental, biological, and appropriate pesticides). • Pesticide management, which includes safety requirements (e.g., Material Safety Data Sheets, precautionary statements, protective equipment); regulatory requirements; spill mitigation measures; groundwater and surface water protection measures associated with pesticide use; and pesticide applicator certifications, licenses, and training (i.e., all pesticide applicators must be certified by the California Department of Pesticide Regulation). • <u>All rodenticides containing anticoagulants shall be prohibited from use on the Project site or Mitigation Preserve lands. The probation shall be clearly described and distributed to home buyers through their home purchase contract and CC&Rs.</u>
5.4	**Water Quality**	***The following further edit was identified subsequent to publication of the Final EIR in May 2018 and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors.*** **MM 4-2** The Project shall implement integrated pest management (IPM) and landscaping best management practices (BMPs) consistent with the integrated pest management and pesticide and fertilizer application guidelines established by the University of California Division of Agriculture and Natural Resources Statewide Integrated Pest Management Program which are available online at http://www.ipm.ucdavis.edu/. The integrated pest management program will be provided to the County in association with the Landscape Plan submitted to the County with each tentative tract map. The IPM and landscaping BMPs shall be confirmed in a Landscaping Plan submitted to the County during the review and approval process for each tract map application. The BMPs shall include a Planting Plan that is consistent with the plant water use requirements of Section 3.~~3~~4 of the Centennial Specific Plan; with procedures for removing non- native vegetation and planting native vegetation; with fertilizer guidelines; and with the IPM approach for preventing or suppressing pest problems (i.e., insects and diseases). This shall be done through a combination of techniques including using pest-resistant plants; using biological controls; incorporating cultural practices; including habitat modification; and judiciously using pesticides. The IPM and landscaping BMPs shall, in addition to identifying IMP and landscaping BMP management and funding roles and responsibilities, monitoring, training, and timely IPM and BMP program review requirements to incorporate new technologies that may become available, address the following: • Pest identification. • Practices to prevent pest incidence and to reduce pest buildup. • Monitoring to examine vegetation and surrounding areas for pests to evaluate trends and to identify when controls are needed. • Establishment of action thresholds that trigger control actions. • Pest-control methods (cultural, mechanical, environmental, biological, and appropriate pesticides). • Pesticide management, which includes safety requirements (e.g., Material Safety Data Sheets, precautionary statements, protective equipment); regulatory requirements; spill mitigation measures; groundwater and surface

TABLE 1-2
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#	Environmental Factor	Mitigation
		water protection measures associated with pesticide use; and pesticide applicator certifications, licenses, and training (i.e., all pesticide applicators must be certified by the California Department of Pesticide Regulation). • All rodenticides containing anticoagulants shall be prohibited from use on the Project site or Mitigation Preserve lands. The ~~probation~~ prohibition shall be clearly described and distributed to home buyers through their home purchase contracts and CC&Rs.
5.4	**Water Quality**	**MM 4-3** The Project shall, to the maximum extent feasible, retain, temporarily store and use native topsoil as topsoil cover in disturbed areas of the Project, and shall, in consultation with a qualified plant biologist, implement measures to encourage the germination of native plants in locations where native topsoil is used as a topsoil cover within the Project.
5.4	**Water Quality**	***The following further edit was identified subsequent to publication of the Final EIR in May 2018 and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors.*** **MM 4-3** The Project shall, to the maximum extent feasible, retain, temporarily store and use native topsoil as topsoil cover in disturbed areas of the Project, and shall, in consultation with a qualified plant biologist, implement measures to encourage the germination of native plants in locations where native topsoil is used as a topsoil cover within the Project. Measures to encourage germination of native plants may include: • Stockpile top soil at height no greater than 3 feet to retain native microorganisms • Upon re-spreading of top soil, ensure soil placement areas are de-compacted for a minimum depth of one foot • Conduct monthly weed removal following top soil placement in the first growing season and prior to seed setting to reduce competition for native plant species • Conduct annual weed control in the post growing season, but prior to seed setting to further reduce and maintain low competition for native plant species • Minimize disturbance of top soil to prevent new location for weed establishment • Avoid irrigation overspray and run-off from adjacent areas that could lead to increased weed establishment • Monitor and protect areas of native vegetation through signage and avoidance to the maximum extent feasible. • Minimize weed seed source by implementing weed control on an as-needed basis and prohibit planting of non-native invasive species identified by California Invasive Plant Council within adjacent areas.
5.4	**Water Quality**	**MM 4-4** The Project Applicant/Developer shall prepare, in consultation with a qualified biologist, a Restoration and Revegetation Monitoring Plan for the Project. The Restoration and Revegetation Monitoring Plan shall include appropriate metrics, as determined by the qualified biologist, for determining the success of Project revegetation efforts, including revegetation implemented in compliance with the approved Mitigation and Monitoring Plan for the Project. The Restoration and Revegetation Monitoring Plan shall be submitted to the County and updated as appropriate during the review and approval process for each tract map application.

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#	Environmental Factor	Mitigation
5.6	**Cultural and Tribal Resources**	**MM 6-1** The Project Applicant/Developer shall retain a qualified Archaeologist who shall oversee archaeological monitoring of topsoil grading and removals (including clearing, grubbing, and trenching) in the immediate vicinity of the following 25 archaeological sites that are within the grading footprint and ~~1~~2 site<u>s</u> in the open space area that ~~is~~ <u>are</u> immediately adjacent to the development impact area: CA-LAN-3201, CA-LAN-3202H, <u>CA-LAN-3217,</u> CA-LAN-3219H, CA-LAN-3227, CA-LAN-3230, CA-LAN-3232, CA-LAN-3233, CA-LAN-3234, CA-LAN-3236, CA-LAN-3237, CA-LAN-3238, CA-LAN-3239, CA-LAN-3240, CA-LAN-3241, CA-LAN-3242, CA-LAN-3243, CA-LAN-3244, CA-LAN-3245, CA-LAN-3246, CA-LAN-3247, CA-LAN-3248, CA-LAN-3250, CA-LAN-3251, CA-LAN-3252, CA-LAN-3253, and CA-LAN-3985H. <u>CA-LAN-3217 and</u> CA-LAN-3227 ~~is~~ <u>are</u> ~~the site~~ immediately adjacent to the grading footprint. Additionally, a Native American monitor representing the Tejon Indian Tribe shall be present during topsoil grading and removals in the vicinity of the 2~~6~~<u>7</u> above-listed archaeological sites. ~~T~~ <u>Prior to the issuance of grading permits, the</u> Project Applicant/Developer shall provide written evidence to the County that a qualified Archaeologist has been retained~~,~~ <u>to carry out all mitigation measures related to archeological and historical resources. A qualified Archaeologist is defined as an archaeologist meeting the Secretary of the Interior's Standards for professional archaeology. The qualified Archaeologist</u> shall<u>:</u> be present at the pre-grading meeting; ~~shall~~ establish procedures for archaeological resource surveillance, including coordination with representatives of the Tejon Indian Tribe on the location and schedule of Native American monitoring; and ~~shall~~ establish (in cooperation with the Project Applicant/Developer and/or County as well as the Tejon Indian Tribe) procedures for temporarily halting or redirecting work to permit the sampling, identification, and evaluation of any artifacts found, as appropriate. The qualified Archaeologist shall develop and submit an Archaeological Resource Monitoring Plan to the County for sites in development areas. The qualified Archaeologist and a Native American monitor representing the Tejon Indian Tribe shall be retained to attend pre-grade meetings and to monitor earth-moving activities, including clearing, grubbing and trenching, in the vicinity (i.e., the area of a site reasonably expected to contain archaeological resources plus a buffer of at least 10 meters [33 feet]) of any and/or all cultural resource sites. <u>For implementation of each tract map, if no subsurface Native American or archaeological remains are identified in the vicinity of an archaeological resources site during that initial grading, continuous monitoring will no longer be required but the Project Archaeologist and Native American monitor shall spot-check all additional subsurface excavations in the vicinity of an archaeological resources site at least once a week for the duration of grading and excavation activities or until the monitor deems site clear. The Project Archaeologist shall be responsible for coordinating the location and schedule of Native American monitors.</u> The Archaeologist and Native American monitor shall carefully inspect these areas to assess the potential for significant prehistoric or historic remains. If potentially significant archaeological resources are uncovered, <u>the qualified Archaeologist and Native American monitor shall halt or redirect ground-disturbing activities away from the vicinity, and</u> a subsurface test and/or evaluation shall be performed to assess the discovery. Further subsurface investigation or data recovery shall be undertaken if the resource is determined <u>by the Project Archaeologist to be</u> unique or historically significant (i.e., important for its prehistoric or historic information) and therefore eligible for the California Register of Historical Resources (CRHR).

TABLE 1-2
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#	Environmental Factor	Mitigation
		The archaeological procedures required by the Archaeological Resource Monitoring Plan shall be incorporated as a note on the Grading Plan cover sheet. If additional or unexpected archaeological features are discovered, the qualified Archaeologist shall report such findings in writing to the County and/or the Tejon Indian Tribe. If archaeological resources are found to be of possible significance, the qualified Archaeologist shall determine appropriate actions, in cooperation with the County and the Tejon Indian Tribe, for further exploration and/or salvage in accordance with this mitigation measure. The Archaeologist shall submit a Follow-up Report to the County. The Follow-up Report shall include: the period of inspection; an analysis of any artifacts found; and the present repository of the artifacts. Recovered finds shall be offered to the County of Los Angeles and the Tejon Indian Tribe on a first refusal basis. If the artifacts are refused, the Project Applicant/Developer may retain said finds if written assurance is provided that they will be properly preserved in Los Angeles County, unless (1) said finds are of special significance or (2) a museum in the County of Los Angeles indicates a desire to study and/or display them, in which case the items shall be donated to the County or its designee. If the Project Applicant/Developer provides no such assurance, the County shall retain the artifacts and shall be subject to the same stipulations set forth in this mitigation measure for disposition of artifacts. These actions, as well as final mitigation and disposition of the resources, shall be subject to the approval of the County. The Project ~~Applicant/Developer shall retain a certified~~ Archaeologist ~~who~~ will perform a Phase II subsurface test-level investigation and surface collection for archaeological resource sites of undetermined CRHR eligibility discovered during monitoring. A Phase II Test-level Report shall be completed that evaluates the sites; includes a discussion of the sites' significance (depth, nature, condition, and extent of the resources); and contains recommendations for final mitigation and cost estimates (if required) to fully mitigate significant impacts. Should the Phase II subsurface test-level investigation and surface collection determine the ~~potential~~ presence of significant ~~subsurface~~ archaeological resources that are eligible for CRHR listing, then potential Project impacts to the eligible archaeological resources site shall be mitigated to a less than significant level through the implementation of one of the mitigation options discussed below~~.~~: a. Relocation of grading boundaries and fuel modification zones to completely avoid disturbance to the site(s) of eligible archaeological resources. ~~Should boundary relocation be infeasible~~ If it is determined that the relocation of grading boundaries and fuel modification zones in accordance with this subsection (a) is not feasible, then a qualified Archaeologist shall be present in the vicinity of eligible archaeological resources sites during grading and fuel modification brush clearance. (**NOTE:** confidential archaeological mapping is on file at the Natural History Museum of Los Angeles County and the South Central Coastal Information Center [SCCIC] at California State University, Fullerton. Review of this material is restricted to qualified individuals and project proponents on a need to know basis.) Fencing shall be erected outside the eligible archaeological resources sites to visually depict the areas to be avoided during construction. All eligible archaeological resources sites avoided in accordance with this subsection (a) shall be subject to the preservation requirements of MM 6-4. b. Per California Environmental Quality Act (CEQA) Guidelines Section 15126.4(b)(3)(A), grading boundary redesign and preservation in accordance with subsection (a) shall be the preferred means to avoid impacts to

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#	Environmental Factor	Mitigation
		eligible archaeological resources. However, consistent with CEQA Guidelines Section 15126(b)(3)(C), ~~I~~if it is determined that avoidance and/or preservation of any eligible archaeological resources sites in accordance with subsection (a) are not feasible, then prior to grading in the vicinity of such eligible archaeological resources sites, Phase III data recovery (salvage excavations) shall be conducted for ~~these~~ such eligible archaeological sites or any other eligible sites within the potential impact area of development that cannot be avoided. (**NOTE:** confidential archaeological mapping is on file at the Natural History Museum of Los Angeles County and the SCCIC. Review of this material is restricted to qualified individuals and project proponents on a need to know basis.) When Phase III data recovery is undertaken, a data recovery plan, which makes provision for adequately recovering the scientifically consequential information from and about the eligible archaeological resource, shall be prepared by a qualified Archaeologist prior to any excavation being undertaken. The Phase III work shall provide sufficient scientific information to fully mitigate the impacts of development on these sites to a level considered less than significant and shall be performed in accordance with the standards of the State Historic Preservation Office (SHPO). Excavated assemblages shall be offered to the County and/or the Tejon Indian Tribe on a first refusal basis. If the artifacts are refused, the Project Applicant/Developer may retain said finds if written assurance is provided that they will be properly preserved in Los Angeles County, unless (1) said finds are of special significance or (2) a museum in the County of Los Angeles indicates a desire to study and/or display them, in which case the items shall be donated to the County or its designee. If the Project Applicant/Developer provides no such assurance, the County shall retain the artifacts and shall be subject to the same stipulations set forth in this mitigation measure for disposition of artifacts. Final mitigation shall be carried out based upon the recommendations in the Phase II Test Level Report, and the County shall make a determination as to the site's disposition based on the recommendations of the qualified Archaeologist. Possible determinations include, but are not limited to, preservation, salvage, partial salvage, or no mitigation necessary.
5.6	**Cultural and Tribal Resources**	***The following further edit was identified subsequent to publication of the Final EIR in May 2018 and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors.*** **MM 6-1** The Project Applicant/Developer shall retain a qualified Archaeologist who shall oversee archaeological monitoring of topsoil grading and removals (including clearing, grubbing, and trenching) in the immediate vicinity of the following 25 archaeological sites that are within the grading footprint and 2 sites in the open space area that are immediately adjacent to the development impact area: CA-LAN-3201, CA-LAN-3202H, CA-LAN-3217, CA-LAN-3219H, CA-LAN-3227, CA-LAN-3230, CA-LAN-3232, CA-LAN-3233, CA-LAN-3234, CA-LAN-3236, CA-LAN-3237, CA-LAN-3238, CA-LAN-3239, CA-LAN-3240, CA-LAN-3241, CA-LAN-3242, CA-LAN-3243, CA-LAN-3244, CA-LAN-3245, CA-LAN-3246, CA-LAN-3247, CA-LAN-3248, CA-LAN-3250, CA-LAN-3251, CA-LAN-3252, CA-LAN-3253, and CA-LAN-3985H. CA-LAN-3217 and CA-LAN-3227 are immediately adjacent to the grading footprint. Additionally, a Native American monitor representing the Tejon Indian Tribe shall be present during topsoil grading and removals in the vicinity of the 27 above-listed archaeological sites.

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#	Environmental Factor	Mitigation
		Prior to the issuance of grading permits, the Project Applicant/Developer shall provide written evidence to the County that a qualified Archaeologist has been retained to carry out all mitigation measures related to archeological and historical resources. A qualified Archaeologist is defined as an archaeologist meeting the Secretary of the Interior's Standards for professional archaeology. The qualified Archaeologist shall: be present at the pre-grading meeting; establish procedures for archaeological resource surveillance, including coordination with representatives of the Tejon Indian Tribe on the location and schedule of Native American monitoring; and establish (in cooperation with the Project Applicant/Developer and/or County as well as the Tejon Indian Tribe) procedures for temporarily halting or redirecting work to permit the sampling, identification, and evaluation of any artifacts found, as appropriate. The qualified Archaeologist shall develop and submit an Archaeological Resource Monitoring Plan to the County for sites in development areas. The qualified Archaeologist and a Native American monitor representing the Tejon Indian Tribe shall be retained to attend pre-grade meetings and to monitor earth-moving activities, including clearing, grubbing and trenching, in the vicinity (i.e., the area of a site reasonably expected to contain archaeological resources plus a buffer of at least 10 meters [33 feet]) of any and/or all cultural resource sites. For implementation of each tract map, if no subsurface Native American or archaeological remains are identified in the vicinity of an archaeological resources site during that initial grading, continuous monitoring will no longer be required but the Project Archaeologist and Native American monitor shall spot-check all additional subsurface excavations in the vicinity of an archaeological resources site at least once a week for the duration of grading and excavation activities or until the monitor deems site clear. The Project Archaeologist shall be responsible for coordinating the location and schedule of Native American monitors. The Archaeologist and Native American monitor shall carefully inspect these areas to assess the potential for significant prehistoric or historic remains. If potentially significant archaeological resources are uncovered, the qualified Archaeologist and Native American monitor shall halt or redirect ground-disturbing activities away from the vicinity, and a subsurface test and/or evaluation shall be performed to assess the discovery. Further subsurface investigation or data recovery shall be undertaken if the resource is determined by the Project Archaeologist to be unique or historically significant (i.e., important for its prehistoric or historic information) and therefore eligible for the California Register of Historical Resources (CRHR). The archaeological procedures required by the Archaeological Resource Monitoring Plan shall be incorporated as a note on the Grading Plan cover sheet. If additional or unexpected archaeological features are discovered, the qualified Archaeologist shall report such findings in writing to the County and/or the Tejon Indian Tribe. If archaeological resources are found to be of possible significance, the qualified Archaeologist shall determine appropriate actions, in cooperation with the County and the Tejon Indian Tribe, for further exploration and/or salvage in accordance with this mitigation measure. The Archaeologist shall submit a Follow-up Report to the County. The Follow-up Report shall include: the period of inspection; an analysis of any artifacts found; and the present repository of the artifacts. Recovered finds shall be offered to the County of Los Angeles and the Tejon Indian Tribe on a first refusal basis. If the artifacts are refused, the Project Applicant/Developer may retain said finds if written assurance is provided that they will be properly preserved

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#	Environmental Factor	Mitigation
		in Los Angeles County, unless (1) said finds are of special significance or (2) a museum in the County of Los Angeles indicates a desire to study and/or display them, in which case the items shall be donated to the County or its designee. If the Project Applicant/Developer provides no such assurance, the County shall retain the artifacts and shall be subject to the same stipulations set forth in this mitigation measure for disposition of artifacts. These actions, as well as final mitigation and disposition of the resources, shall be subject to the approval of the County. The Project Archaeologist will perform a Phase II subsurface test-level investigation and surface collection for archaeological resource sites of undetermined CRHR eligibility discovered during monitoring. A Phase II Test-level Report shall be completed that evaluates the sites; includes a discussion of the sites' significance (depth, nature, condition, and extent of the resources); and contains recommendations for final mitigation and cost estimates (if required) to fully mitigate significant impacts. Should the Phase II subsurface test-level investigation and surface collection determine the presence of significant archaeological resources that are eligible for CRHR listing, then potential Project impacts to the eligible archaeological resources site shall be mitigated to a less than significant level through the implementation of one of the mitigation options discussed below: a. Relocation of grading boundaries and fuel modification zones to completely avoid disturbance to the site(s) of eligible archaeological resources. If it is determined that the relocation of grading boundaries and fuel modification zones in accordance with this subsection (a) is not feasible, then a qualified Archaeologist shall be present in the vicinity of eligible archaeological resources sites during grading and fuel modification brush clearance. (**NOTE:** confidential archaeological mapping is on file at the Natural History Museum of Los Angeles County and the South Central Coastal Information Center [SCCIC] at California State University, Fullerton. Review of this material is restricted to qualified individuals and project proponents on a need to know basis.) Fencing shall be erected outside the eligible archaeological resources sites to visually depict the areas to be avoided during construction. All eligible archaeological resources sites avoided in accordance with this subsection (a) shall be subject to the preservation requirements of MM 6-4. b. Per California Environmental Quality Act (CEQA) Guidelines Section 15126.4(b)(3)(A), grading boundary redesign and preservation in accordance with subsection (a) shall be the preferred means to avoid impacts to eligible archaeological resources. However, consistent with CEQA Guidelines Section 15126(b)(3)(C), if it is determined that avoidance and/or preservation of any eligible archaeological resources sites in accordance with subsection (a) are not feasible, then prior to grading in the vicinity of such eligible archaeological resources sites, Phase III data recovery (salvage excavations) shall be conducted for such eligible archaeological sites or any other eligible sites within the potential impact area of development that cannot be avoided. (**NOTE:** confidential archaeological mapping is on file at the Natural History Museum of Los Angeles County and the SCCIC. Review of this material is restricted to qualified individuals and project proponents on a need to know basis.) When Phase III data recovery is undertaken, a data recovery plan, which makes provision for adequately recovering the scientifically consequential information from and about the eligible archaeological resource, shall be prepared by a qualified Archaeologist prior to any excavation being undertaken. The Phase III work shall provide sufficient scientific information to fully mitigate the impacts of development on these sites to a level considered less than

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#	Environmental Factor	Mitigation
		significant and shall be performed in accordance with the standards of the State Historic Preservation Office (SHPO). Excavated assemblages shall be offered to the County and/or the Tejon Indian Tribe on a first refusal basis. If the artifacts are refused, the Project Applicant/Developer may retain said finds if written assurance is provided that they will be properly preserved in Los Angeles County, unless (1) said finds are of special significance or (2) a museum in the County of Los Angeles indicates a desire to study and/or display them, in which case the items shall be donated to the County or its designee. If the Project Applicant/Developer provides no such assurance, the County shall retain the artifacts and shall be subject to the same stipulations set forth in this mitigation measure for disposition of artifacts. Final mitigation shall be carried out based upon the recommendations in the Phase II Test Level Report, and the Natural History Museum of Los Angeles County shall make a determination as to the site's disposition based on the recommendations of the qualified Archaeologist. Possible determinations include, but are not limited to, preservation, salvage, partial salvage, or no mitigation necessary.
5.6	**Cultural and Tribal Resources**	**MM 6-2** Prior to ground disturbing activities, ~~A~~archaeological sites CA-LAN-3201, CA-LAN-3206, CA-LAN-3217, CA-LAN-3227, CA-LAN-3240, and CA-LAN-3242 shall be surrounded with high visibility construction fencing with a buffer of approximately 50 feet around each site to ensure that the archaeological sites are completely avoided during construction-related activities. A qualified Archaeologist shall work with surveying teams and the Construction Supervisor to fence the area to be avoided prior to the commencement of grading.
5.6	**Cultural and Tribal Resources**	**MM 6-3** Prior to the issuance of grading permits, the ~~The~~ Project Applicant/Developer shall ~~retain~~ provide written evidence to the County that a qualified Archaeologist has been retained to carry out all mitigat~~e~~ion measures related ~~impacts~~ to eligible archaeological sites within the development impact area. A qualified Archaeologist is defined as an archaeologist meeting the Secretary of the Interior's Standards for professional archaeology. ~~Additionally, and~~ A qualified Archaeologist and a Native American monitor representing the Tejon Indian Tribe shall be present during ground-disturbing activities (i.e, topsoil grading and removals) in the vicinity of the following three ~~below-listed~~ eligible archaeological sites~~.~~: CA-LAN-3201; CA-LAN-3240; CA-LAN-3242. Impacts to these three eligible sites ~~(CA-LAN-3201, CA-LAN-3240, and CA-LAN-3242)~~ shall be mitigated to a less than significant level through the implementation of one of the mitigation options described below~~.~~: a. Relocation of grading boundaries and fuel modification zones to completely avoid disturbance to the site(s). ~~Should boundary relocation be infeasible~~ If it is determined that the relocation of grading boundaries and fuel modification zones in accordance with this subsection (a) is not feasible with respect to eligible archaeological resources sites CA-LAN-3201, CA-LAN-3240 and/or CA-LAN-3242, then a qualified Archaeologist and a Native American monitor representing the Tejon Indian Tribe shall be present in the vicinity of any such eligible archaeological resources site during grading and fuel modification brush clearance to monitor all activities and ensure that archaeological resources are not impacted. (**NOTE:** confidential archaeological mapping is on file at the Natural History Museum of Los Angeles County and the SCCIC. Review of this material is restricted to qualified individuals and project proponents on a need to know basis.) Temporary construction ~~F~~fencing shall be erected outside ~~the~~ any such eligible archaeological resources site~~s~~ to visually depict the areas to be avoided

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		during construction, in accordance with MM 6-2. Any temporary fencing materials (i.e., plastic web, chain link, etc.) placed during construction should not become permanent. Any permanent fencing erected in accordance with MM 6-4 to protect the sites should be visually pleasing and consistent with the overall aesthetic experience of the community of Centennial. All eligible archaeological resources sites avoided in accordance within this subsection (a) shall be subject to the preservation requirements of MM 6-4. b. Per California Environmental Quality Act (CEQA) Guidelines Section 15126.4(b)(3)(A), grading boundary redesign and preservation in place in accordance with subsection (a) shall be the preferred means to avoid impacts to eligible archaeological resources. However, consistent with CEQA Guidelines Section 15126.4(b)(3)(C), if it is determined that ~~If~~ avoidance and/or preservation of any eligible archaeological resources sites in accordance with subsection (a) is ~~are~~ not feasible, then prior to grading in the vicinity of such archaeological resources sites, Phase III data recovery (salvage excavations) shall be conducted for ~~these~~ such archaeological resources sites or any other eligible sites within the potential impact area of development that cannot be avoided. (**NOTE:** confidential archaeological mapping is on file at the Natural History Museum of Los Angeles County and the SCCIC. Review of this material is restricted to qualified individuals and project proponents on a need to know basis.) When Phase III data recovery is undertaken, a data recovery plan, which makes provision for adequately recovering the scientifically consequential information from and about the eligible archaeological resource, shall be prepared by a qualified Archaeologist prior to any excavation being undertaken. The Phase III work shall provide sufficient scientific information to fully mitigate the impacts of development on these sites and shall be performed in accordance with the standards of the SHPO. Excavated finds shall be offered to the County and/or the Tejon Indian Tribe on a first refusal basis. If the artifacts are refused, the Project Applicant/Developer may retain said finds if written assurance is provided that they will be properly preserved in Los Angeles County, unless (1) said finds are of special significance or (2) a museum in the County of Los Angeles indicates a desire to study and/or display them, in which case the items shall be donated to the County or its designee. If the Project Applicant/Developer provides no such assurance, the County shall retain the artifacts and shall be subject to the same stipulations set forth in this mitigation measure for disposition of artifacts. Final mitigation shall be carried out based upon the recommendations in the Phase II Test-Level Report, and the County shall make a determination as to the site's disposition based on the recommendations of the qualified Archaeologist and the Native American monitor representing the Tejon Indian Tribe. Possible determinations include, but are not limited to, preservation, salvage, partial salvage, or no mitigation necessary.

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#	Environmental Factor	Mitigation
5.6	**Cultural and Tribal Resources**	**MM 6-4** ~~The Project Applicant/Developer~~ A qualified Archaeologist meeting the requirements of the Secretary of the Interior's Standards for professional archaeology shall develop and implement an Archaeological Resources Site-Protection Program aimed to protect and preserve identified CRHR-eligible archaeological resources avoided in accordance with subsection (a) of MM 6-1 and/or MM 6-3, as well as any identified archaeological resources site located within the Project site's open space areas that is of known eligibility for CRHR listing and which are vulnerable to disturbance during Project construction and/or operation. Identified archaeological resources sites located within the Project site's open space that are of unknown eligibility for CRHR listing and which are vulnerable to disturbance shall also be protected under the Archaeological Resources Site-Protection Program in accordance with this MM 6-4, provided that no such site shall be subject to this MM 6-4 if a Phase II archaeological investigation performed by a qualified Archaeologist in accordance with Secretary of the Interior Standards determines that such site is not unique and is thus ineligible for CRHR listing. Th~~is~~e Archaeological Resources Site-Protection P~~p~~rogram shall be prepared by the qualified monitoring Archaeologist familiar with the resources present within the Project boundaries, ~~and~~ shall be approved by the County, and shall include implementation of one or more of the following: a. Fencing and/or other access-restriction methods shall be placed around the archaeologically sensitive areas of the Project site to inhibit human access. This ~~is especially~~ subsection (a) shall be applicable to sites CA-LAN-3217 and CA-LAN-3227, unless the qualified Archaeologist determines that such sites are more appropriately protected in accordance with subsections (b) or (c) of this MM 6-4~~.~~; or b. Non-invasive plant species with thorns (e.g., prickly pear cactus [*Opuntia* spp.]) or other deterrent characteristics shall be planted in areas close to known resources in order to discourage human presence; this is generally applicable to the majority of sites to be preserved in areas of native vegetation~~.~~; or c. Known eligible resources shall be capped with a layer of chemically inactive soil/sediment, in consultation with a qualified Archaeologist. This ~~is especially~~ subsection (c) shall be applicable to sites CA-LAN-3201, ~~CA-LAN-3206,~~ CA-LAN-3240, and CA-LAN-3242, to the extent such sites are avoided in accordance with subsection (a) of MM 6-3, unless the qualified Archaeologist determines that any such site is more appropriately protected in accordance with subsections (a) or (b) of this MM 6-4. This subsection (c) shall be applicable to site CA-LAN-3206, unless, pursuant to the County-approved Archaeological Resources Site-Protection Program required by this MM 6-4, it is determined that such site is not vulnerable to disturbance. ~~The above-mentioned mitigation~~ This MM 6-4 shall be implemented prior to the completion of construction activities and shall be overseen by the County and/or the Tejon Indian Tribe. The qualified Archaeologist shall prepare a written statement documenting appropriate site-protection measures for submittal to the County. Additionally, a Native American monitor representing the Tejon Indian Tribe shall be present during all initial surface grubbing, initial ground surface grading, and any excavation greater than one-half foot in depth. ~~For implementation of each tract map, if no subsurface Native American or archaeological remains are identified during that initial grading, continuous monitoring will no longer be required but the Native American monitor shall spot-check all additional subsurface excavations at least once a week for the duration of grading and excavation activities or until monitor deems site clear. The Project Archaeologist shall be responsible for coordinating the location and schedule of Native American monitors.~~

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#	Environmental Factor	Mitigation
5.6	**Cultural and Tribal Resources**	**MM 6-5** For the exposed paleontological resources discovered during the Paleo Environmental Associates (PEA) 2009 study (as detailed in the document entitled *Paleontologic Resource Inventory and Impact Assessment Technical Report prepared in support of Centennial Specific Plan, western Antelope Valley, northern Los Angeles County, California*) and any paleontological resources uncovered during grading or excavation activities in or out of the presence of a Monitor, grading activities will be stopped and diverted to a part of the site reasonably away from the find (highly dependent on the size and complexity of the resource), and a qualified Paleontologist shall (1) ascertain the significance of the resources; (2) establish protocol with the Project Applicant/Developer to protect (or mitigate impacts to) such resources; (3) ascertain the presence of additional resources; and (4) provide additional monitoring of the site, if the Monitor deems it appropriate.
5.6	**Cultural and Tribal Resources**	**MM 6-6** A Paleontological Treatment and Monitoring Plan (PTMP) shall be developed by a qualified Paleontologist retained by the Project Applicant/Developer. The PTMP shall be reviewed and approved by the County. This plan shall include a protocol for examining, evaluating, and (if necessary) salvaging known fossil localities identified during the PEA (2009) study (as detailed in the document entitled *Paleontologic Resource Inventory and Impact Assessment Technical Report prepared in support of Centennial Specific Plan, western Antelope Valley, northern Los Angeles County, California*); a grading observation schedule shall be maintained when grading occurs within sedimentary rock units so that the Paleontologist may identify and evaluate fossil resources within the Project site. This qualified Paleontologist shall be retained to attend pre-grade meetings and to monitor deep earth-moving activities (including grading, cutting, and trenching) at the site. Paleontological monitoring shall be conducted by a qualified Paleontologist during grading and other excavation work. Recommended hours for monitoring activities shall be established by the qualified Paleontologist and shall be outlined in the PTMP. It shall be the responsibility of the qualified Paleontologist to demonstrate, to the satisfaction of the County, the appropriate level of monitoring necessary based on the tentative map-level grading plans. The qualified Paleontologist shall carefully inspect PTMP-identified areas in order to assess the potential for significant fossil remains. If potential paleontological resources are uncovered, a subsurface evaluation will be performed to assess the discovery. Further subsurface investigation will be undertaken if the resource is determined unique or important for its paleontological information. Because of the potential for producing small fragments of vertebrate microfossils, the Paleontologist shall conduct reasonable, periodic screening of sands from cuts in these units. Such material may be removed in bulk and screened off site for further analysis.
5.6	**Cultural and Tribal Resources**	**MM 6-7** The qualified Paleontologist retained by the Project Applicant/Developer shall coordinate with appropriate construction contractor personnel to provide information concerning the protection of paleontological resources. Contractor personnel shall be informed that unauthorized fossil collecting is prohibited. The contractor's heavy equipment operators shall be briefed on procedures to be followed in the event that fossil remains and a fossil site are encountered during earth-moving activities (grading or blasting). The briefing shall be presented to new contractor personnel as necessary. Names and telephone numbers of the Monitor and other appropriate mitigation program personnel shall be provided to appropriate contractor personnel and to the County.

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5.6	**Cultural and Tribal Resources**	**MM 6-8** The qualified Paleontologist shall initiate and coordinate recovery operations with the Project Applicant/Developer, and the County of Los Angeles for any significant fossil localities identified in the Paleo Environmental Associates 2009 document entitled *Paleontologic Resource Inventory and Impact Assessment Technical Report prepared in support of Centennial Specific Plan, western Antelope Valley, northern Los Angeles County, California* as well as if significant fossils are exposed during any Project-related grading pursuant to the PTMP. To initiate recovery operations, the Paleontologist shall be allowed to divert or direct grading in the area of exposure to facilitate evaluation and, if identified as potentially significant, to recover significant fossils. The qualified Paleontologist shall notify the Construction Foreman of the discovery of fossil resources and shall discuss recovery methods and the timeline needed to evaluate the find. If a fossil discovery occurs during grading operations when the Paleontologist is not present, grading shall be diverted a reasonable distance away from the area until the qualified Paleontologist can survey the area, conduct recovery operations, and make an assessment on the significance of the find.
5.6	**Cultural and Tribal Resources**	**MM 6-9** A formal museum storage agreement shall be developed between the Project Paleontologist and an accredited institution. Any fossils and their contextual stratigraphic data that are collected during development shall be prepared and identified by a qualified Paleontologist. Excavated significant fossil finds shall be donated with funding for stabilization, identification, and curation on a first right-of-refusal basis to an appropriate, accredited institution that has a retrievable collection system and an educational and research interest in the materials (e.g., the Natural History Museum of Los Angeles County). A final report prepared by the qualified Paleontologist that details the discovery, recovery, laboratory analysis, and findings and disposition of specimens shall be submitted to the County.
5.6	**Cultural and Tribal Resources**	**MM 6-10** In accordance with *California Code of Regulations* (Title 14, Section 15064.5[e]), in the event of the accidental discovery or recognition of any human remains in any location other than a dedicated cemetery, the Los Angeles County Coroner must be notified of the discovery (*California Health and Safety Code,* Section 7050.5) and all activities in the immediate area of the find or in any nearby area reasonably suspected to overlie adjacent human remains must cease until appropriate and lawful measures have been implemented. If the Coroner determines that the remains are not recent, but rather of Native American origin, the Coroner shall notify the Native American Heritage Commission (NAHC) in Sacramento within 24 hours to permit the NAHC to determine the Most Likely Descendent (MLD) of the deceased Native American. The designated MLD may make recommendations to the Project Applicant/Developer or the person responsible for the excavation work, for means of treating or reassignment of the human remains and any associated grave goods with appropriate dignity, as provided in *California Public Resources Code,* Section 5097.98. If any of the following occurs, the Project Applicant/Developer shall rebury the Native American remains and the associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance: (1) the NAHC is unable to identify an MLD; (2) the MLD fails to make a recommendation within 48 hours of being notified of the discovery; or (3) the Project Applicant/Developer rejects the recommendation of the MLD and mediation by the NAHC fails to provide acceptable measures.

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5.7	**Biological Resources**	**MM 7-1** Prior to issuance of grading permits in areas of the Project site that may disturb California androsace, crownscale, round-leaved filaree, Mojave spineflower, sylvan scorzonella, or adobe yampah populations, focused surveys of mitigation lands shall have been completed to confirm compliance with the 2:1 mitigation ratio for the California androsace, crownscale, round-leaved filaree, Mojave spineflower, sylvan scorzonella, and adobe yampah. Surveys will be conducted in accordance with current California Native Plant Society (CNPS) protocol and will occur during the appropriate time of year. The Survey Report shall be submitted to the County and the California Department of Fish and Wildlife (CDFW) for their review. In addition to rare plant species populations that have previously been found in the Mitigation Preserve, newly detected populations will be preserved and managed for long-term preservation. These populations will provide baseline information for management efforts described below and will provide information to help determine habitat suitability in areas where propagation of rare plants may be considered. The Project Applicant shall prepare and implement a Special Status Plant Species Restoration Plan covering the California androsace, crownscale, round-leaved filaree, Mojave spineflower, sylvan scorzonella, and adobe yampah that shall specify the following: (1) identification of and suitability analyses for the enhancement area; (2) procedures for the collection and temporary storage of seed (all available seed from every impacted occurrence shall be collected); (~~2~~ 3) planting procedures, including soil preparation and irrigation; (~~3~~ 4) a schedule and action plan to maintain and monitor enhanced, restored, and/or created populations; (~~4~~ 5) methods to control plant densities (of competing plants) to promote the establishment of California androsace, crownscale, round-leaved filaree, Mojave spineflower, sylvan scorzonella, and adobe yampah; ~~and~~ (~~5~~ 6) a list of County-approved success criteria (e.g., germination rates, growth, plant cover) to compare to the density of existing populations; (7) for creation or enhancement area(s), monitoring to confirm successful implementation of the 2:1 mitigation ratio; and (8) contingency measures to further create or enhance plantings in creation or enhancement areas where monitoring results do not show successful 2:1 mitigation, which shall remain in effect until such time as the 2:1 mitigation ratio has been achieved. The Project Applicant shall develop the Special Status Plant Species Restoration Plan and the County and CDFW shall approve it prior to any vegetation clearing or grading on the site. ~~Adoption of this plan shall be used as the performance standard. An overview of the plan objectives is provided in the Biological Resource Mitigation Program to be submitted and approved by the County prior to issuance of grading permits.~~ Prior to the commencement of vegetation clearing and/or grading activities, the Project Applicant shall contract a qualified firm to harvest California androsace, crownscale, round-leaved filaree, Mojave spineflower, sylvan scorzonella, and adobe yampah seeds from the impacted populations on the Project site. The seeds shall be collected in the manner and time described in the Special Status Plant Species Restoration Plan. The harvested seed shall be used for the enhancement, restoration, or creation of these species' populations to be preserved in open space areas on the Project site. Additionally, prior to implementation of the Plan, a focused survey for the special status species impacted (listed above) shall occur in the preserve areas to document existing populations. The previously documented populations of California androsace, round-leaved filaree, Mojave spineflower, sylvan scorzonella, and adobe yampah occurring in the designated on-site mitigation areas (north of State Route [SR] 138 and south of SR-138), and Mitigation Areas 1, 2, 3 shall be preserved in perpetuity. These existing areas shall be (in order

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#	Environmental Factor	Mitigation
		of priority) preserved, enhanced, expanded, ~~or~~ restored, or created ~~or new areas shall be created in suitable habitat~~ in order to compensate at a 2:1 ratio for the thousands of individual special status plants that will be lost due to the Project. Those portions of the crownscale and Mojave spineflower populations that are located within and along the western edge of the open space polygon located approximately 500 feet east of Cement Plant Road and approximately 650 feet north of the SR-138 shall be protected. No temporary or permanent disturbance (including fuel modification) shall occur in the identified occurrence points or polygons; these occurrence points or polygons shall be flagged by a qualified Biologist prior to the start of Project activities in the area. In addition, the post-construction hydrology that supports these protected populations shall be consistent with the pre-Project hydrologic condition. The supporting area consists of the adjacent slope, which drains to the protected plant populations and consists of approximately 300 feet to the north and north northwest. Additional protective measures are included in MM 7-17. Planting of California androsace, crownscale, round-leaved filaree, Mojave spineflower, sylvan scorzonella, and adobe yampah shall be performed in accordance with the specifications in the Special Status Plant Species Restoration Plan, which will also indicate the target densities for each of these species so that the new populations will support at least as many individuals of each species as were impacted.
5.7	**Biological Resources**	***The following further edit was identified subsequent to publication of the Final EIR in May 2018 and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors.*** **MM 7-1** Prior to issuance of grading permits in areas of the Project site that may disturb California androsace, crownscale, round-leaved filaree, Mojave spineflower, sylvan scorzonella, or adobe yampah populations, focused surveys of mitigation lands shall have been completed by a qualified biologist(s) to confirm compliance with the 2:1 mitigation ratio for the California androsace, crownscale, round-leaved filaree, Mojave spineflower, sylvan scorzonella, and adobe yampah. Surveys will be conducted in accordance with current California Native Plant Society (CNPS) protocol and will occur during the appropriate time of year. The Survey Report shall be submitted to the County and the California Department of Fish and Wildlife (CDFW) for their review. In addition to rare plant species populations that have previously been found in the Mitigation Preserve, newly detected populations will be preserved and managed for long-term preservation. These populations will provide baseline information for management efforts described below and will provide information to help determine habitat suitability in areas where propagation of rare plants may be considered. The Project Applicant shall prepare and implement a Special Status Plant Species Restoration Plan covering the California androsace, crownscale, round-leaved filaree, Mojave spineflower, sylvan scorzonella, and adobe yampah that shall specify the following: (1) identification of and suitability analyses for the enhancement area; (2) procedures for the collection and temporary storage of seed (all available seed from every impacted occurrence shall be collected); (3) planting procedures, including soil preparation and irrigation; (4) a schedule and action plan to maintain and monitor enhanced, restored, and/or created populations; (5) methods to control plant densities (of competing plants) to promote the establishment of California androsace, crownscale, round-leaved filaree, Mojave spineflower, sylvan

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#	Environmental Factor	Mitigation
		scorzonella, and adobe yampah; (6) a list of County-approved success criteria (e.g., germination rates, growth, plant cover) to compare to the density of existing populations; (7) for creation or enhancement area(s), monitoring to confirm successful implementation of the 2:1 mitigation ratio; and (8) contingency measures to further create or enhance plantings in creation or enhancement areas where monitoring results do not show successful 2:1 mitigation, which shall remain in effect until such time as the 2:1 mitigation ratio has been achieved and maintained for one full growing season. The Project Applicant shall develop the Special Status Plant Species Restoration Plan and the County and CDFW shall approve it prior to any vegetation clearing or grading on the site. Prior to the commencement of vegetation clearing and/or grading activities, the Project Applicant shall contract a qualified firm to harvest California androsace, crownscale, round-leaved filaree, Mojave spineflower, sylvan scorzonella, and adobe yampah seeds from the impacted populations on the Project site. The seeds shall be collected in the manner and time described in the Special Status Plant Species Restoration Plan. The harvested seed shall be used for the enhancement, restoration, or creation of these species' populations to be preserved in open space areas on the Project site. Additionally, prior to implementation of the Plan, a focused survey for the special status species impacted (listed above) shall occur in the preserve areas to document existing populations. The previously documented populations of California androsace, round-leaved filaree, Mojave spineflower, sylvan scorzonella, and adobe yampah occurring in the designated on-site mitigation areas (north of State Route [SR] 138 and south of SR-138), and Mitigation Areas 1, 2, 3 shall be preserved in perpetuity. These existing areas shall be (in order of priority) preserved, enhanced, expanded, restored, or created in order to compensate at a 2:1 ratio for the thousands of individual special status plants that will be lost due to the Project. Those portions of the crownscale and Mojave spineflower populations that are located within and along the western edge of the open space polygon located approximately 500 feet east of Cement Plant Road and approximately 650 feet north of the SR-138 shall be protected. No temporary or permanent disturbance (including fuel modification) shall occur in the identified occurrence points or polygons; these occurrence points or polygons shall be flagged by a qualified Biologist prior to the start of Project activities in the area. In addition, the post-construction hydrology that supports these protected populations shall be consistent with the pre-Project hydrologic condition. The supporting area consists of the adjacent slope, which drains to the protected plant populations and consists of approximately 300 feet to the north and north northwest. Additional protective measures are included in MM 7-17. Planting of California androsace, crownscale, round-leaved filaree, Mojave spineflower, sylvan scorzonella, and adobe yampah shall be performed in accordance with the specifications in the Special Status Plant Species Restoration Plan, which will also indicate the target densities for each of these species so that the new populations will support at least as many individuals of each species as were impacted.

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#	Environmental Factor	Mitigation
5.7	**Biological Resources**	**MM 7-2** <u>All grubbing/grading within a phase of construction shall be scheduled and implemented to facilitate the voluntary movement of localized wildlife towards intact adjacent habitat. Islands of habitat should not be created during site disturbance unless they are to be retained as un-impacted following the Project buildout.</u> A pre-construction/grading survey of all areas proposed for construction/grading activities that contain potentially suitable habitat for silvery legless lizard, coast horned lizard, <u>and</u> two-striped garter snake~~, and American badger~~ shall be conducted by a qualified Biologist. Surveys will consist of 1 pass-through by a qualified Wildlife Biologist walking 50-meter belt transects across areas to be impacted while visually searching for the species listed above. Surveys will be conducted no more than three days prior to the disturbance of the surveyed area. If any of these species or other wildlife species that can be easily moved are observed within the construction/grading zone, the Biologist (who must have a valid California Scientific Collecting Permit) shall relocate them to a suitable area outside the construction zone. Suitable areas would include appropriate habitats within the proposed open space areas in the northwestern portion of the Project site and would be identified in a Wildlife Relocation Plan (described below) prior to surveys but before construction begins. Areas adjacent to Quail Lake and on the Project site potentially supporting western pond turtle breeding habitat shall not be disturbed during the breeding season for the turtles (April through August). No Project activities shall occur within ~~300~~ <u>400</u> feet from the edge of Quail Lake, due to potential for nesting in those areas. <u>Prior to issuance of grading or building permit, the Project Proponent shall conduct appropriate burrowing owl pre-construction surveys and avoidance and mitigation measures as identified below.</u> <u>*Burrowing Owl Pre-Construction Surveys*</u> <u>The project biologist shall conduct pre-construction take-avoidance surveys no more than 30 days prior to ground-disturbing activities within each construction area. Focused burrowing owl surveys shall be conducted in accordance with the CDFW Staff Report on Burrowing Owl Mitigation (March 2012). Breeding season surveys shall include at least four survey passes completed between February 15 and July 15, with at least one visit between February 15 and April 15, and a minimum of three survey visits (at least 3 weeks apart) between April 15 and July 15, including at least one visit after June 15. Non-breeding season surveys shall include at least four visits spread evenly throughout the non-breeding season. The surveys shall be conducted in suitable burrowing owl habitat within 150 meters (492 feet) of the project footprint. Surveys shall be conducted by walking 20-meter transects. Because burrowing owls can recolonize a site after a few days, time lapses between project activities trigger subsequent take avoidance surveys, including, but not limited to an additional survey within 24 hours of ground-disturbing activities. Once surveys are completed, the project biologist shall prepare a survey report on the survey methods and results.</u> <u>*Burrowing Owl Avoidance and Mitigation Measures*</u> <u>Submit for DRP and CDFW approval and subsequently implement a Burrowing Owl Exclusion Plan, which includes four avoidance and relocation strategy tiers and associated mitigation requirements set forth in the CDFW Staff</u>

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		Report on Burrowing Owl Mitigation (CDFG 2012): Tier 1 – Avoidance Buffers; Tier 2 – Passive Relocation; Tier 3 – Prevention of Recolonization of Development Areas; and Tier 4 – Active Relocation (Optional). Site monitoring shall be required prior to, during, and after exclusions of burrowing owls from their burrows. Excluded burrowing owls shall be monitored and documented using artificial or natural borrows on adjoining Mitigation Preserve lands or other open space. Avoidance buffers shall be established in accordance with the buffer distances described in the CDFW Staff Report on Burrowing Owl Mitigation (CDFG 2012), which range from 50 to 500 meters, depending on the season and level of disturbance. The buffers may be reduced, but only after consultation with and approval from CDFW. ~~Pre-construction burrowing owl and Swainson's hawk surveys shall be conducted in all potentially suitable habitat areas prior to initial site preparation. Methods employed shall be consistent with standard and appropriate protocols for both species within the appropriate season of the year prior to construction. Burrowing owl pre-construction surveys shall be conducted prior to the start of construction/ground-breaking activities. Surveys will be conducted following the California Department of Fish and Wildlife's (CDFW's) 2012 burrowing owl survey protocol. These surveys shall be conducted weekly beginning 30 days prior to the start of construction with the final survey occurring 1 day prior to construction.~~ ~~If pre-construction surveys locate an active Swainson's hawk nest on the Project site, then no construction activities will occur within ½ mile of the nest between March 1 and September 15. Furthermore, a Swainson's hawk Monitoring and Mitigation Plan shall be prepared within 90 days after locating an active Swainson's hawk nest in consultation with the County and the CDFW.~~ Prior to issuance of grading or building permit, the Project Proponent shall conduct appropriate Swainson's hawk pre-construction surveys and avoidance and mitigation measures as identified below. *Swainson's hawk pre-construction surveys* Pre-construction surveys for Swainson's hawk shall be conducted during the two survey periods prior to construction by the Project Lead Biologist following the survey methods developed by the Swainson's Hawk Technical Advisory Committee (SWHA TAC 2000). These methods include surveying for active nests within a 0.5-mile radius of all Project activities prior to construction activities. *Swainson's hawk avoidance measures* If active Swainson's hawk nests (defined as nests used during one or more of the last 5 years) are found during these surveys, the Project Proponent shall utilize the CDFW *Staff Report Regarding Mitigation for Impacts to Swainson's Hawks* (Buteo swainsoni) *in the Central Valley of California* for addressing the species as modified below. During initial ground disturbance construction, no intensive disturbances (e.g., heavy equipment operation associated with construction, use of cranes or draglines, new rock-crushing activities) or other Project-related activities that may

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#	Environmental Factor	Mitigation
		cause nest abandonment or forced fledging shall occur within 0.5-mile of an active nest between January 1 and September 15, unless take authorization is obtained and provides otherwise. The buffer zone may be decreased to 0.25-mile around nests for subsequent construction (i.e., in areas where disturbance—such as heavy equipment operation associated with construction, use of cranes or draglines, new rock-crushing activities—is not a normal occurrence during the nesting season). Active nest trees (where the nest is intact and has been used in the last 5 years) shall not be removed unless there is no practicable way of avoiding them. Encroachment of construction within the 0.5-mile buffer and removal of active nesting trees shall only be undertaken subject to consultation with CDFW and issuance of If an active nest tree must be removed, a California Fish and Game Code Section 2081 Incidental Take Permit, and associated conditions, if any are required. The tree removal period shall be limited to between October 1 and December 31. *Swainson's hawk monitoring during construction* If construction or other Project-related activities that may cause nest abandonment or forced fledging are necessary within the buffer zone, prior acquisition of an Incidental Take Permit shall be required. Monitoring of the nest site by the Project Lead Biologist is required to determine whether the nest is abandoned. If the nest is abandoned and if the nestlings are still alive, the master developer shall fund the recovery and hacking (i.e., the controlled release of captive-reared young) of the nestling(s). Existing activities such as agricultural activities, commuter traffic, and routine facility maintenance activities within 0.25-mile of an active nest shall not be prohibited. The Wildlife Relocation Plan shall describe: (1) all areas potentially suitable for receiving relocated animals and (2) methods that shall be used in the relocation process. Methods shall include appropriate species-specific handling techniques, including adherence to the Amphibian Task Force Fieldwork Code of Practice, ~~and appropriate hygienic methods~~ to prevent the spread of pathogens. The Plan shall also identify thresholds for the number of individuals of each species that shall be allowed to be placed in any particular area. The Wildlife Relocation Plan shall be prepared by a qualified biologist ~~the Project Applicant/Developer~~ and submitted to the CDFW prior to Project implementation for review and comment. The plan shall be approved by the County prior to issuance of the first grading permit. County and CDFW approval of the Plan shall indicate that the performance standards have been met. The Plan shall be implemented prior to grading an area for which the pre-construction survey identified one or more of these species. Although, implementation of the mitigation plan may have some impact on wildlife, it is expected to be negligible relative to the project as a whole and expected to me a net positive effect as required. Prior to issuance of grading or building permit, the Project Proponent shall conduct appropriate golden eagle pre-construction surveys and avoidance measures as identified below. *Golden eagle pre-construction surveys* Pre-construction surveys for golden eagle shall be conducted prior to construction activities. Surveys for active nests will be conducted by the Project Lead Biologist in all potentially suitable habitat areas within a 0.5-mile radius

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#	Environmental Factor	Mitigation
		of all Project activities. Methods employed shall be consistent with standard and appropriate protocols for golden eagle and within the appropriate season of the year prior to construction. *Golden eagle avoidance measures* If active golden eagle nests are found during these surveys, no intensive disturbances (e.g., heavy equipment operation associated with construction, use of cranes or draglines, new rock-crushing activities) or other Project-related activities that may cause nest abandonment or forced fledging shall occur during initial ground disturbance construction within 0.50 mile of an active nest between March 1 and September 15. The buffer zone may be decreased to 0.25 mile around nests for subsequent construction (i.e., in areas where disturbance—such as heavy equipment operation associated with construction, use of cranes or draglines, new rock-crushing activities—is not a normal occurrence during the nesting season). Active nest trees (where the nest is intact and has been used in the last year) shall not be removed. For the American badger specifically, the following pre-construction survey and avoidance measure protocols shall be implemented. *American Badger Pre-Construction Surveys and Avoidance Conditions* Pre-construction winter/non-natal surveys for American badger shall be required for any construction activities commencing between November 1 and February 15. Surveys shall be conducted within potentially suitable habitat, within 100 feet of disturbance zones, no more than 14 days prior to construction activities to determine whether American badger winter dens are present within disturbance zone or within 100 feet of the disturbance zone boundary. If Project activities are delayed or suspended for more than 14 days, the project-construction surveys shall be repeated. If an American badger winter or non-natal den is occupied within the disturbance zone or within 100 feet of the disturbance zone, then the den location shall be clearly marked with fencing or flagging, in a manner that does not isolate the badger from intact adjacent habitat or prevent the badger from accessing the den, to avoid inadvertent impacts on the den. The den shall be monitored by a qualified biologist to confirm normal activities during construction. If it is not practicable to avoid the wintering or non-natal den during construction activities, CDFW will be contacted. Construction activities shall be allowed to proceed when the den is vacated. Pre-construction natal den surveys for American badger shall be required for any construction activities commencing between March 15 and July 31. Pre-construction surveys shall be conducted within potentially suitable habitat, within 200 feet of the disturbance zone, by the project biologist, no earlier than 14 days prior to ground-disturbing construction activities to determine whether American badger natal dens are present within the project disturbance zone or within 200 feet of the disturbance zone. If active natal dens are located within these areas during pre-construction surveys, construction activities shall be postponed. If natal dens are detected during construction, construction activities shall be halted within 200 feet of the natal den. This buffer may be reduced based on the location of the den or type of construction activity, based on

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#	Environmental Factor	Mitigation
		the direction of the project biologist and CDFW has agreed in writing. Construction activities shall not preclude the ability of the documented badgers to disperse to on-site open space or off-site habitat when the natal den is vacated (i.e., habitat suitable for dispersal must be maintained until dispersal occurs). Construction will be postponed or halted in these areas until it is determined by the project biologist that the young are no longer dependent on the natal den. To avoid inadvertent impacts during construction and to ensure that construction activities are at least 200 feet from active natal dens, any active natal dens within the survey area shall be clearly marked with fencing or flagging in a manner that does not isolate the badger from sufficient intact adjacent habitat, prevent the badger from accessing the den, or inhibiting normal behavioral activities (e.g., foraging and dispersing from the site) by the mother and pups. Construction activities shall be allowed to proceed when the den is vacated. Pre-construction surveys for the ring-tailed cat shall be conducted throughout the Project disturbance area in the appropriate season within the year prior to disturbance. If results are negative, Project activities will proceed without further restrictions in regard to this species. If detected, the applicant shall consult with CDFW and modify Project activities at that time to ensure complete avoidance and no take of ring-tailed cat will occur.
5.7	**Biological Resources**	**MM 7-3** For all grading and construction activities, the Project Applicant/Developer shall retain a qualified Biologist (with selection reviewed by the County) to ensure that incidental construction impacts on special status wildlife species are avoided or minimized. The Biologist shall relocate silvery legless lizard, coast horned lizard, two-striped garter snake~~, American badger,~~ and any other special status wildlife species that can be moved which would otherwise be destroyed or adversely affected by construction and/or site-preparation activities. Responsibilities of the Construction Biological Monitor shall include: a. Attendance at the pre-construction meeting to ensure that timing and location of construction activities do not conflict with other mitigation requirements (e.g., seasonal surveys for nesting birds). The meeting shall be conducted with the Contractor and other key construction personnel to describe the importance of restricting work to designated areas. b. Discussion with the Contractor of procedures to minimize harm/harassment of wildlife that may be encountered during construction. C. Review/designation of the construction area with the Contractor in accordance with the Final Grading Plan. Haul roads, access roads, and on-site staging and storage areas shall be sited in grading areas to minimize degradation of habitat adjacent to these areas. If activities outside these limits are necessary, they shall be evaluated by the Biologist to ensure no special status species or habitats will be affected. d. A field review that is conducted to stake designated construction limits (to be set by the Surveyor). Any construction activity areas immediately adjacent to riparian areas or other special status resources (such as large trees or bird nests) may be flagged or temporarily fenced by the Monitor at his/her discretion. e. Periodic visits to the site during construction to coordinate and monitor compliance with the above provisions. f. Submittal of a brief report to the County and CDFW discussing any conflicts or errors resulting in impacts to special status resources within 48 hours of the incident. At the conclusion of construction of each planning area,

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#	Environmental Factor	Mitigation
		submittal of a Final Report discussing the results of the activities and any recommendations for improving the process. Submission of this report shall be the performance standard. In addition, a Biological Monitor will be on site during all initial vegetation removal and will employ salvage methods to minimize direct impacts to common wildlife species. Where feasible, the biological monitor will attempt to ensure wildlife are out of potential direct impact. ~~If a wildlife species is in harm's way and has not moved on its own, the Biologist will attempt to scare them away from the area. If wildlife does not move, and where feasible, the wildlife species will be relocated to suitable habitat.~~ In order to further reduce impacts to special status wildlife, restrictions shall be placed on the Contractor. These restrictions are related to hours of operation and blasting requirements. Responsibilities of the Construction Contractor shall include: a. All Project-related activities during construction shall be restricted to daylight hours. Night work and associated lighting shall not be permitted during and night work shall be prohibited throughout the Project site to reduce the potential adverse effect on special status species. b. Vehicle and equipment access within the Project site shall be restricted to existing roads and overland travel shall be minimized and confined to areas where development will occur to the greatest extent feasible. c. If blasting is required, applicable federal, State, and local requirements would be observed, and any necessary permits and authorizations would be obtained. d. Best Management Practices Guidelines developed by the Institute of Makers of Explosives (IME) would be implemented. e. To avoid impacts to special-status-biological resources, blasting would occur during the rough-grading activities of construction phase of the Project only between the hours of 10:00 am and 4:00 pm. f. To avoid potential affects to birds, blasting would occur outside the nesting bird season (i.e. blasting shall occur only between September 15 and January 1). No blasting shall occur within 1 mile of the winter perch for bald eagle during the winter season (October 15 to March 15). g. Prior to blasting, a blasting monitoring team including the Project biologist and one acoustician would be formed. The Project biologist would assess and provide guidance related to the criteria for impact on any nearby noise sensitive species. The acoustician should have a minimum of five years of acoustical measurement experience and would be responsible for the blast noise and vibration measurements. h. Blasts should be measured with a calibrated Type 1 sound level meter set to the fast or impulse integration response. If possible, the low frequency cut off should be set as low as possible, ideally 2 Hz or lower. Peak sound levels should be measured at a known distance from blast between the blast site and the noise sensitive species habitat (identified by the Project biologist). If the Project biologist sees fit, the low frequency cut off requirements may be waived or adjusted to address the sensitive species in the area. If measured peak levels exceed the criteria, blasts shall be altered in a way to reduce the impact. Such mitigation efforts may include: Reducing the

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		explosive material, altering the packing and placement of the explosive material, or changing the location of the blasting efforts. i. The biologist has the authority to stop blasting efforts or advise the blast team on the method of mitigation.
5.7	**Biological Resources**	***The following further edit was identified subsequent to publication of the Final EIR in May 2018 and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors.*** **MM 7-3** For all grading and construction activities, the Project Applicant/Developer shall retain a qualified Biologist (with selection reviewed by the County) to ensure that incidental construction impacts on special status wildlife species are avoided or minimized. The Biologist shall relocate silvery legless lizard, coast horned lizard, two-striped garter snake and any other special status wildlife species that can be moved which would otherwise be destroyed or adversely affected by construction and/or site-preparation activities. Responsibilities of the Construction Biological Monitor shall include: a. Attendance at the pre-construction meeting to ensure that timing and location of construction activities do not conflict with other mitigation requirements (e.g., seasonal surveys for nesting birds). The meeting shall be conducted with the Contractor and other key construction personnel to describe the importance of restricting work to designated areas. b. Discussion with the Contractor of procedures to minimize harm/harassment of wildlife that may be encountered during construction. C. Review/designation of the construction area with the Contractor in accordance with the Final Grading Plan. Haul roads, access roads, and on-site staging and storage areas shall be sited in grading areas to minimize degradation of habitat adjacent to these areas. If activities outside these limits are necessary, they shall be evaluated by the Biologist to ensure no special status species or habitats will be affected. d. A field review that is conducted to stake designated construction limits (to be set by the Surveyor). Any construction activity areas immediately adjacent to riparian areas or other special status resources (such as large trees or bird nests) may be flagged or temporarily fenced by the Monitor at his/her discretion. e. Periodic visits to the site during construction to coordinate and monitor compliance with the above provisions. f. Submittal of a brief report to the County and CDFW discussing any conflicts or errors resulting in impacts to special status resources within 48 hours of the incident. At the conclusion of construction of each planning area, submittal of a Final Report discussing the results of the activities and any recommendations for improving the process. Submission of this report shall be the performance standard. In addition, a Biological Monitor will be on site during all initial vegetation removal and will employ salvage methods to minimize direct impacts to common wildlife species. Where feasible, the biological monitor will attempt to ensure wildlife are out of potential direct impact.

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		In order to further reduce impacts to special status wildlife, restrictions shall be placed on the Contractor. These restrictions are related to hours of operation and blasting requirements. Responsibilities of the Construction Contractor shall include: a. All Project-related activities during construction shall be restricted to daylight hours. Night work and associated lighting ~~shall not be permitted during and night work~~ shall be prohibited throughout the Project site to reduce the potential adverse effect on special status species. b. Vehicle and equipment access within the Project site shall be restricted to existing roads and overland travel shall be minimized and confined to areas where development will occur to the greatest extent feasible. c. If blasting is required, applicable federal, State, and local requirements would be observed, and any necessary permits and authorizations would be obtained. d. Best Management Practices Guidelines developed by the Institute of Makers of Explosives (IME) would be implemented. e. To avoid impacts to special-status-biological resources, blasting would occur during the rough-grading activities of construction phase of the Project only between the hours of 10:00 am and 4:00 pm. f. To avoid potential affects to birds, blasting would occur outside the nesting bird season (i.e. blasting shall occur only between September 15 and January 1). No blasting shall occur within 1 mile of the winter perch for bald eagle during the winter season (October 15 to March 15). g. Prior to blasting, a blasting monitoring team including the Project biologist and one acoustician would be formed. The Project biologist would assess and provide guidance related to the criteria for impact on any nearby noise sensitive species. The acoustician should have a minimum of five years of acoustical measurement experience and would be responsible for the blast noise and vibration measurements. h. Blasts should be measured with a calibrated Type 1 sound level meter set to the fast or impulse integration response. If possible, the low frequency cut off should be set as low as possible, ideally 2 Hz or lower. Peak sound levels should be measured at a known distance from blast between the blast site and the noise sensitive species habitat (identified by the Project biologist). If the Project biologist sees fit, the low frequency cut off requirements may be waived or adjusted to address the sensitive species in the area. If measured peak levels exceed the criteria, blasts shall be altered in a way to reduce the impact. Such mitigation efforts may include: Reducing the explosive material, altering the packing and placement of the explosive material, or changing the location of the blasting efforts. i. The biologist has the authority to stop blasting efforts or advise the blast team on the method of mitigation.

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5.7	**Biological Resources**	**MM 7-4** All open space preservation areas adjacent to active construction sites shall be denoted with wildlife-friendly fencing installed and maintained during construction to ensure that construction activities remain within the development footprint. Construction area temporary signage shall not have holes (or holes shall be covered or filled within the top four inches) to prevent raptor talon entanglement. Construction fencing and signage will be overseen by the Project Biologist.
5.7	**Biological Resources**	**MM 7-5** Within the year prior to, and within the appropriate season, focused surveys for the following special status species shall be repeated: arroyo toad, Tehachapi slender salamander, California red-legged frog (concurrent with two-striped garter snake and western pond turtle focused surveys), western spadefoot, mountain plover, southwestern willow flycatcher, western yellow-billed cuckoo, and least Bell's vireo. Surveys shall be conducted within all areas of potentially suitable habitat and in accordance with the approved CDFW or U.S. Fish and Wildlife Species (USFWS) protocol for that species. Western spadefoot pre-constructions surveys and avoidance measures shall be implemented as follows: *Western spadefoot pre-construction surveys* Prior to approval of a Grading Permit, the applicant shall provide to the County evidence verified by the Project Biologist that the area proposed to be graded, including a 300-foot buffer area, has been surveyed for suitable western spadefoot breeding habitat. If suitable breeding habitat is identified, the verification shall include a map of the delineated areas, including the 300-foot buffer, which are to be avoided. Surveys shall be conducted within 60 days prior to construction during a time of year when the species can be detected above ground at suitable breeding sites. Suitable breeding habitat is defined as areas of temporarily ponded water, including within creeks and within the valley floor uplands. Suitable breeding sites should support ponded water for at least three weeks. To ensure that diseases are not conveyed between work sites by the Project Biologist or his or her assistants, the fieldwork code of practice developed by the Declining Amphibian Populations Task Force will be followed at all times. *Western spadefoot avoidance measures* If western spadefoot is detected within the Project footprint, measure "(i)" shall be implemented with appropriate review and concurrence from CDFW. If western spadefoot is detected outside the Project footprint, but within 300 feet of the Project footprint boundary, measure "(ii)" shall be implemented. Prior to implementation of avoidance measures, the Project Biologist shall confer with CDFW. If western spadefoot is detected (including egg masses and larvae) in water within the Project footprint and cannot be permanently avoided (e.g., by placing a resource avoidance area over the site), suitable breeding habitat shall be created within suitable natural sites in open space outside of the Project footprint under the direction of the Project Biologist. The amount of occupied breeding habitat to be impacted by the Project shall be replaced at a 2:1 ratio. The habitat creation location shall be in suitable habitat within on-site open space and as far away as feasible from residential and commercial development and roads. The created breeding habitat shall be designed such that it supports standing water for no longer than three months following winter rains so that aquatic predators (e.g., fish,

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#	Environmental Factor	Mitigation
		bullfrogs, and crayfish) cannot become established. Terrestrial habitat surrounding the proposed relocation site shall be as similar in type, aspect, and density to the location of the impacted breeding site as feasible. No site preparation or construction activities shall be permitted within 300 feet of the vicinity of the impacted breeding site until the design and construction of the pool habitat in preserved areas of the site have been completed and all detected western spadefoot tadpoles, egg masses, and adults are moved to the created breeding habitat. The Project Biologist shall monitor the relocation site for a cumulative total of five years in which environmental conditions are conducive for western spadefoots to successfully complete the breeding cycle (i.e., adequate rain for pools to hold water for a sufficient period). Monitoring shall be conducted during and immediately following peak breeding season such that surveys can be conducted for adults as well as for egg masses, larval, and metamorphic western spadefoot. Success criteria for the monitoring program shall include verifiable evidence of western spadefoot reproduction at the relocation site during five years with suitable breeding conditions. If western spadefoot is detected (including egg masses and larvae) in water within 300 feet of the Project footprint boundary, but not within the Project footprint itself, an exclusion fence shall be constructed along the Project boundary between the construction footprint and the occupied breeding site to prevent western spadefoots from moving into and aestivating within the construction footprint. The exclusion fencing shall consist of 16-inch metal flashing, or an equivalent material, which shall be buried at least 6 inches below the ground surface, extending at least 8 inches above the ground. The fencing shall cover a sufficient length of the boundary to inhibit western spadefoots from entering the Project footprint without entrapping aestivating western spadefoot. The necessary length and appropriate location of the exclusion fence relative to the occupied breeding site shall be determined by the Project Biologist. No construction activities involving heavy equipment generating noise, ground vibration, and/or dust shall be allowed within 300 feet of occupied breeding sites until western spadefoots have metamorphized and are no longer present in the breeding pool, as determined by the Project Biologist. Acceptable Project activities (e.g., quiet and/or low impact activities) within 300 feet of the occupied breeding site shall be allowed at the discretion of the Project Biologist. Preconstruction surveys and avoidance measures for the least Bell's vireo and southwestern willow flycatcher, specifically shall be as follows: *Least Bell's vireo and southwestern willow flycatcher pre-construction surveys* In the season prior to construction, within all potentially suitable habitat within 0.5 mile of proposed construction areas, the Project Biologist shall conduct focused surveys for least Bell's vireo and southwestern willow flycatcher. Least Bell's vireo surveys will follow the currently accepted Least Bell's Vireo Survey Guidelines (USFWS 2001). Surveys for southwestern willow flycatcher will be conducted using the methods outlined in A Natural History Summary and Survey Protocol for the Southwestern Willow Flycatcher, issued by the U.S. Geological Survey (USGS)

TABLE 1-2
CENTENNIAL SPECIFIC PLAN MITIGATION SUMMARY

#	Environmental Factor	Mitigation
		and U.S. Department of the Interior and approved by the U.S. Fish and Wildlife Service (USFWS) (Sogge et al. 2010). Surveys for least Bell's vireo and southwestern willow flycatcher will be conducted concurrently. *Least Bell's vireo and southwestern willow flycatcher avoidance measures* If active nests are found, clearing and construction within 0.5 mile of the nest shall be postponed or halted until the nest is vacated and juveniles have fledged, as determined by the Project Biologist, and there is no evidence of a second attempt at nesting. If no active nests are observed, construction may proceed. If active nests are found, work may proceed provided that construction activity is located at least 0.5 mile from active nests (or as authorized through take permits). This buffer may be adjusted provided noise levels do not exceed 60 dBA hourly L_{eq} at the edge of the nest site as determined by a qualified biologist in coordination with a qualified acoustician. If the noise meets or exceeds the 60 dBA L_{eq} threshold, or if the biologist determines that the construction activities are disturbing nesting activities, the biologist shall have the authority to halt the construction and shall devise methods to reduce the noise and/or disturbance in the vicinity. This may include methods such as, but not limited to, turning off vehicle engines and other equipment whenever possible to reduce noise, installing a protective noise barrier between the nest site and the construction activities, and working in other areas until the young have fledged. If noise levels still exceed 60 dBA L_{eq} hourly at the edge of nesting territories and/or a no-construction buffer cannot be maintained, construction shall be deferred in that area until the nestlings have fledged. All active nests shall be monitored on a weekly basis until the nestlings fledge. The qualified biologist shall be responsible for documenting the results of the surveys and the ongoing monitoring and for reporting these results to CDFW and USFWS.
5.7	**Biological Resources**	**MM 7-6** Construction Monitoring - The Project Applicant~~/Developer~~ shall retain a ~~qualified~~ CDFW/USFWS-approved "Authorized Biologist ~~with knowledge of California condors,~~" to ~~monitor~~ be on-call during all construction activities. If condors are observed foraging or landing in the Project area~~. The resumes of the proposed Biologist(s) will be provided to the CDFW for concurrence. This Biologist(s) will be referred to as the "Authorized Biologist" hereinafter. During clearing and grubbing of construction areas~~, the Authorized Biologist shall ~~be present at all times. During mass grading, construction sites shall be monitored on a daily basis, and the Authorized Biologist will~~ have the authority to stop all construction activities until appropriate corrective measures have been ~~completed~~ implemented. If condors are observed landing in the Project area, the Applicant shall avoid further construction within 500 feet of the sighting until the animals have left the area, or as otherwise authorized by CDFW and USFWS. If the condors are nesting within 0.5-mile of any Project area, no construction activities shall occur within this 0.5-mile buffer until the condors leave, or as otherwise directed by CDFW and USFWS. All condor sightings in the Project area ~~will~~ shall be reported to CDFW and USFWS within 24 hours of the sighting. ~~To further protect California condors potentially foraging in the Project area over the long term from negative interactions with humans and/or artificial structures, the~~ Cattle Carcass Relocation - The Project Applicant~~/Developer~~ shall remove dead cattle that are found ~~or reported~~ within 1,000 feet of the boundary of a residential or commercial development within 24 hours. ~~Dead cattle shall be relocated to a predetermined location.~~ The Approved Biologist will

TABLE 1-2
CENTENNIAL SPECIFIC PLAN MITIGATION SUMMARY

#	Environmental Factor	Mitigation
		select locations ~~where carcasses shall be placed shall be~~ a minimum of 1,000 feet from ~~a~~ development ~~area boundary. Appropriate locations~~ areas for ~~transfer~~ relocation of carcasses ~~include open grasslands and oak/grassland areas where condors can readily detect carcasses and easily land and take off without encountering physical obstacles such as powerlines and other utility structures~~. The proposed locations would be ~~selected and~~ approved by the CDFW and USFWS. ~~Pursuant to this measure, a~~ A telephone number for reporting dead cattle shall be provided ~~and actively maintained. Any cattle carcasses transferred to the relocation areas shall be reported to the USFWS Condor Group~~ by the Applicant. Utility Hazards - All surfaces on new antennae and phone/utility towers shall be designed, installed, and operated with anti-perching devices in conformance with Avian Power Line Interaction Committee standards to deter California condors and other raptors from perching. Whenever possible, utility towers and antennae should be self-supporting (i.e. not use guy wires), and be as visible as possible (using sold panel siding or dense/wide lattice work). Condor Educational Curriculum - The Applicant shall provide a Condor Educational Curriculum that includes the life history of the California condor, how to identify condors, TRC hunting rules and regulations, prohibited behaviors related to condors such as hunting with lead ammunition, and the legal consequences of inadvertently or otherwise illegally shooting or harming California condors. The information will also identify types of microtrash that could be ingested by adult breeding condors and describe measures to eliminate microtrash and provide information on how to report roadkill for removal. In addition, these rules, regulations, and prohibitions shall be listed within CC&Rs. Microtrash - During construction, the ~~area~~ Applicant shall ~~be~~ ensure that all Project areas are kept clean of debris ~~(e.g., cable, trash, and construction materials). The Project Applicant/Developer shall collect all~~ including microtrash and litter ~~(i.e., anything shiny, such as broken glass), vehicle fluids, and food waste from the Project area on a daily basis~~. Workers ~~shall~~ will be trained on the issue of microtrash: what constitutes microtrash, its potential effects on California condors, and how to avoid the deposition of microtrash. In addition, the Applicant will ensure that routine community maintenance activities include regular efforts to eliminate microtrash on and near all work sites, recreational events, roads, and adjacent open space areas. If it is determined that condors are ingesting microtrash in the Project area, the Applicant, CDFW, and USFWS shall evaluate potential remedies to reduce, and, if possible, eliminate microtrash ingestion. Such remedies may include increased education and awareness to residents, guests, staff, and workers regarding the dangers of microtrash, increased monitoring of events and activities that are potential sources of microtrash, and more frequent collection of microtrash. Condor Deterrent Activities - If the Authorized Biologist deems it necessary, USFWS California condor hazing methods that do not rise to the level of "Take" under the ESA (Service 2014) will be employed. Only the Authorized Biologist, with approval from the USFWS, will conduct hazing and only when such actions are warranted. If the Authorized Biologist is not immediately available, a subset of less aggressive hazing methods, such as yelling, stomping, leashed

TABLE 1-2
CENTENNIAL SPECIFIC PLAN MITIGATION SUMMARY

#	Environmental Factor	Mitigation
		dog barking or low pressure water spray, may be used when a clear escape route for the condors is identified and upon guidance from USFWS. Condor Tracking – The Applicant will provide the USFWS with twenty-five (25) GPS satellite tracking transmitters (total cost not to exceed $150,000.00) prior to grading plan approval. This will allow the USFWS to more quickly identify the immediate location of birds that are not moving relative to the ground, which usually indicates that an injury, illness, or death has occurred. The ability to track the movements and locations of individual condors can aid in the monitoring of the overall effectiveness of measures to minimize and mitigate the indirect impact of microtrash by locating possible areas where microtrash was ingested. It can also aide in identifying the location where condors were shot if such an incident were to occur.
5.7	**Biological Resources**	***The following further edit was identified subsequent to publication of the Final EIR in May 2018 and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors.*** **MM 7-6** Construction Monitoring - The Project Applicant shall retain a CDFW/USFWS-approved "Authorized Biologist," to be on-call during all construction activities. If condors are observed foraging or landing in the Project area, the Authorized Biologist shall have the authority to stop all construction activities until appropriate corrective measures have been implemented. If condors are observed landing in the Project area, the Applicant shall avoid further construction within 500 feet of the sighting until the animals have left the area, or as otherwise authorized by CDFW and USFWS. If the condors are nesting within 0.5-mile of any Project area, no construction activities shall occur within this 0.5-mile buffer until the condors leave, or as otherwise directed by CDFW and USFWS. All condor sightings in the Project area shall be reported to CDFW and USFWS within 24 hours of the sighting. Cattle Carcass Relocation - The Project Applicant shall remove dead cattle that are found within 1,000 feet of the boundary of a residential or commercial development within 24 hours. The Approved Biologist will select locations a minimum of 1,000 feet from development areas for relocation of carcasses. The proposed locations would be approved by the CDFW and USFWS. A telephone number for reporting dead cattle shall be provided by the Applicant. Utility Hazards - All surfaces on new antennae and phone/utility towers shall be designed, installed, and operated with anti-perching devices in conformance with Avian Power Line Interaction Committee standards to deter California condors and other raptors from perching. Whenever possible, utility towers and antennae should be self-supporting (i.e. not use guy wires), and be as visible as possible (using ~~sold~~ solid panel siding or dense/wide lattice work). Condor Educational Curriculum - The Applicant shall provide a Condor Educational Curriculum that includes the life history of the California condor, how to identify condors, TRC hunting rules and regulations, prohibited behaviors related to condors such as hunting with lead ammunition, and the legal consequences of inadvertently or otherwise illegally shooting or harming California condors. The information will also identify types of microtrash that could be ingested by adult breeding condors and describe measures to eliminate microtrash and provide information on how to report roadkill for removal. In addition, these rules, regulations, and prohibitions shall be listed within CC&Rs.

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CENTENNIAL SPECIFIC PLAN MITIGATION SUMMARY

#	Environmental Factor	Mitigation
		Microtrash - During construction, the Applicant shall ensure that all Project areas are kept clean of debris including microtrash and litter. Workers will be trained on the issue of microtrash: what constitutes microtrash, its potential effects on California condors, and how to avoid the deposition of microtrash. In addition, the Applicant will ensure that routine community maintenance activities include regular efforts to eliminate microtrash on and near all work sites, recreational events, roads, and adjacent open space areas. If it is determined that condors are ingesting microtrash in the Project area, the Applicant, CDFW, and USFWS shall evaluate potential remedies to reduce, and, if possible, eliminate microtrash ingestion. Such remedies may include increased education and awareness to residents, guests, staff, and workers regarding the dangers of microtrash, increased monitoring of events and activities that are potential sources of microtrash, and more frequent collection of microtrash. Condor Deterrent Activities - If the Authorized Biologist deems it necessary, USFWS California condor hazing methods that do not rise to the level of "Take" under the ESA (Service 2014) will be employed. Only the Authorized Biologist, with approval from the USFWS, will conduct hazing and only when such actions are warranted. If the Authorized Biologist is not immediately available, a subset of less aggressive hazing methods, such as yelling, stomping, leashed dog barking or low pressure water spray, may be used when a clear escape route for the condors is identified and upon guidance from USFWS. Condor Tracking – The Applicant will provide the USFWS with twenty-five (25) GPS satellite tracking transmitters (total cost not to exceed $150,000.00) prior to grading plan approval. This will allow the USFWS to more quickly identify the immediate location of birds that are not moving relative to the ground, which usually indicates that an injury, illness, or death has occurred. The ability to track the movements and locations of individual condors can aid in the monitoring of the overall effectiveness of measures to minimize and mitigate the indirect impact of microtrash by locating possible areas where microtrash was ingested. It can also aide in identifying the location where condors were shot if such an incident were to occur.
5.7	**Biological Resources**	**MM 7-7** The Project shall incorporate avoidance and additional open space buffer features for <u>each of the two</u> ~~this~~ <u>known</u> tricolored blackbird nesting <u>areas on and adjacent to the Project site</u> ~~area~~. Permanent impacts will be restricted to a distance of 400 feet from the nesting area excluding small impact areas associated with infrastructure and utilities along SR-138 immediately south of Quail Lake. The nesting area will be delineated by a qualified Ornithologist based on all available data (three years of site-specific data shall be used). Temporary impacts (i.e., construction noise) within <u>a ¼ mile</u> ~~400 feet~~ <u>of active nesting areas</u> shall be restricted to the non-breeding season. The breeding season for this species shall be considered April 1 through July 1. <u>The applicant shall consult with CDFW and may obtain an Incidental Take permit if determined appropriate.</u> ~~The Project shall include enhancement, restoration, and/or preservation of potentially suitable tricolored blackbird breeding and foraging habitat. Potentially suitable areas for enhancement and preservation include lower Oso Canyon proximate to Cement Plant Road, as well as any other created water bodies as part of the Project Drainage Plan, where feasible. Enhancement factors shall include the creation of bulrush marsh habitat or other substrate known to support~~

TABLE 1-2
CENTENNIAL SPECIFIC PLAN MITIGATION SUMMARY

#	Environmental Factor	Mitigation
		~~breeding tricolored blackbirds; a persistent nearby standing water during the breeding season; and available adjacent foraging habitat with an appropriate food source.~~
5.7	**Biological Resources**	**MM 7-8** ~~Project construction activities (including, but not limited to, staging and disturbances to native and nonnative vegetation, structures, and substrates) shall occur outside of the avian breeding season, if feasible, which generally runs from February 1–August 31 (as early as January 1 for some raptors) to avoid take of birds or their eggs. "Take" means to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture or kill (California Fish and Game Code, Section 86), and includes take of eggs or young resulting from disturbances that cause abandonment of active nests. Depending on the avian species present, a qualified Biologist may determine that a change in the breeding season dates is warranted.~~ ~~If avoidance of the avian breeding season is not feasible, a qualified Biologist with experience in conducting breeding bird surveys shall conduct weekly bird surveys beginning 30 days prior to the initiation of Project activities, to detect protected native birds occurring in suitable nesting habitat that is to be disturbed and (as access to adjacent areas allows) any other such habitat within 500 feet of the disturbance area. The surveys shall continue on a weekly basis with the last survey being conducted no more than three days prior to the initiation of Project activities. If a protected native bird is found, the Project Applicant/Developer shall delay all Project activities within 300 feet of on- and off-site suitable nesting habitat (within 500 feet for suitable raptor nesting habitat) until August 31. Alternatively, the qualified Biologist could continue the surveys in order to locate any nests. If an active nest is located, Project activities within 300 feet of the nest (within 500 feet for raptor nests) or as determined by a qualified Biological Monitor, must be postponed until the nest is vacated; the juveniles have fledged; and there is no evidence of a second attempt at nesting. Flagging, stakes, or construction fencing shall be used to demarcate the inside boundary of the buffer of 300 feet (or 500 feet) between the Project activities and the nest. Project personnel, including all contractors working on site, shall be instructed on the sensitivity of the area. The Project Applicant/Developer shall provide the Department of Regional Planning with the results of the recommended protective measures described above to document compliance with applicable State and federal laws pertaining to the protection of native birds.~~ ~~If the Biological Monitor determines that a narrower buffer between the Project activities and observed active nests is warranted, he/she shall submit a written explanation as to why (e.g., species-specific information; ambient conditions and birds' habituation to them; and the terrain, vegetation, and birds' lines of sight between the Project activities and the nest and foraging areas) to the Department of Regional Planning and, upon request, the CDFW. Based on the submitted information, the Department of Regional Planning (and the CDFW, if the CDFW requests) will determine whether to allow a narrower buffer.~~ ~~The Biological Monitor shall be present on site during all grubbing and clearing of vegetation to ensure that these activities remain within the Project footprint (i.e., outside the demarcated buffer); to ensure that the flagging/stakes/fencing is being maintained; and to minimize the likelihood that active nests are abandoned or fail due to Project activities. The Biological Monitor shall send weekly monitoring reports to the Department of Regional Planning during the grubbing and clearing of vegetation, and shall notify the Department of Regional Planning immediately if Project activities damage active avian nests.~~

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CENTENNIAL SPECIFIC PLAN MITIGATION SUMMARY

#	Environmental Factor	Mitigation
		The Project Biologist shall conduct pre-construction nesting bird surveys no earlier than seven days prior to any Project-related construction/ground disturbance activities within each construction area and a 500-foot buffer that occurs during the nesting/breeding season of special-status bird species potentially nesting on the site, with the exception of the special-status bird species addressed under separate subheadings below (including burrowing owl, golden eagle, and Swainson's hawk). The pre-construction surveys shall be conducted between January 1 and September 15, or as determined by the Project Biologist. If construction activities are delayed for more than 14 consecutive days, the surveys shall be repeated. The purpose of the pre-construction nesting bird surveys will be to determine whether occupied nests are present in the disturbance zone or within 500 feet of the disturbance zone boundary. If occupied nests are found, then limits of construction to avoid occupied nests shall be established by the Project Biologist in the field with flagging, fencing, fencing, or other appropriate barriers. The following minimum no-disturbance buffers will be required: 250 feet around active non-listed passerine nests and 500 feet around active non-listed raptor nests. Construction personnel shall be instructed on the sensitivity of nest areas. Project-related activities will not occur within the no-disturbance buffers. The Project Biologist shall serve as a construction monitor during those periods when construction activities are to occur near active nest areas to avoid inadvertent impacts to these nests. The Project Biologist may adjust the 250-foot or 500-foot setback at his or her discretion depending on the species, the behavioral baseline conditions determined through passive monitoring, and the location of the nest (e.g., if the nest is well-protected in an area buffered by dense vegetation). Once a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival, construction may proceed in the setback areas. Monitoring reports shall include information regarding active nests and status of nests.
5.7	**Biological Resources**	**MM 7-9** ~~A qualified Biologist (retained by the Project Applicant/Developer with selection reviewed by the County) shall conduct a field survey no earlier than 20 days prior to any grading activity that would occur during the breeding season (i.e., April 1 through August 31) of native bat species that potentially utilize the site. This should be done to determine if active roosts of special status bats (such as pallid bat) are present in the applicable habitats on the site (e.g., woodlands). If active roosts are found, construction within 200 feet shall be postponed or halted until the roost is vacated and juveniles are self-sufficient, as determined by the Biologist.~~ Prior to issuance of grading or building permit, the Project Proponent shall conduct appropriate pre-construction bat surveys for bat roosts for pallid bat, western mastiff bat, western red bat, Townsend's big-eared bat as identified below. a) Pre-Construction Surveys: No earlier than one year prior to the commencement of construction activities for each construction area, a pre-construction survey shall be conducted by qualified project biologists to establish areas of roosts occupancy of special-status bats (including maternity roosts, non-maternity roosts, and winter hibernacula) are present in the Project disturbance zone and within 300 feet of the Project disturbance zone boundary. The number of required project biologists and number of survey nights will be based on the size of the construction area to assure that the whole of the construction area can be adequately surveyed. The surveys shall consist of:

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#	Environmental Factor	Mitigation
		i. Two spring surveys (April through June) and two winter surveys (November through January); ii. Each survey consists of one dusk emergence Each survey consists of one dusk emergence survey (start one hour before sunset and last for three hours), followed by one pre-dawn re-entry survey (start one hour before sunrise and last for two hours), and one daytime visual inspection of all potential roosting habitat in the construction area; iii. For each survey areas, conduct all three survey types within one 24-hour period; iv. Construction areas too large to be adequately assessed in one survey, as determined by the Project biologist, shall be divided into multiple smaller survey areas. iv. Focus visual inspections on the identification of bat sign (i.e., individuals, guano, urine staining, corpses, feeding remains, scratch marks and bats squeaking and chattering); and v. Use bat detectors, bat call analysis and visual observations during all dusk emergence and pre-dawn re-entry surveys. Data collection for each survey shall include the following information: i. Whether bats are, or have been, present at roosts on the Project site; ii. Assemblage of species using the site for roosting; iii. Type of roost (i.e., maternity roost, day roost, night roost, feeding perch, mating roost, satellite roost, transitional roost or winter hibernaculum); iv. Location, ambient temperature, internal dimensions and the aspect and orientation of the roost; v. Spatial and temporal distribution of bat roosting activity; vi. Flight paths, exit and entrance points; vii. Number of bats, time and duration of use observed during roost surveys; viii. Photographs; and ix. Identification of any survey constraints. x. If roosts are detected during pre-construction surveys, the following avoidance measures will be implemented unless relocation and/or take is authorized under California Endangered Species Act (CESA), as required by applicable law. b) Avoidance Measures Fencing Installation i. For Maternity Roosts: If an active maternity roost is identified in these areas, the maternity roost will not be directly or indirectly disturbed by prohibiting clearing and grubbing adjacent to the roost site, prohibiting lighting use near the roost site where it would shine on the roost or interfere with bats entering or leaving the roost, prohibiting the bird netting and prohibiting the operation of internal combustion equipment, such as generators, pumps and vehicles within 300 feet of the roost site until the

TABLE 1-2
CENTENNIAL SPECIFIC PLAN MITIGATION SUMMARY

#	Environmental Factor	Mitigation
		maternity roost is vacated and juveniles have fledged, as determined by the project biologist. The rearing season for native bat species in California is approximately April 1 through August 31. ii. For Hibernacula or Non-Maternity Roosts: If non-breeding bat roosts (hibernacula or non-maternity roosts) are found within the disturbance zone, the following shall be implemented: a. Avoid direct and indirect impacts to roosting sites by prohibiting all project-related activities within 100 feet of the roost. b. Additionally, within 300 feet of the roost, prohibit clearing and grubbing adjacent to the roost site and lighting use near the roost site where it would shine on the roost or interfere with bats entering or leaving the roost. Prohibit the operation of internal combustion equipment, such as generators, pumps and vehicles, and the use of bird netting. c. If avoidance of roost sites is infeasible, maintain portions of the features that provide naturalized habitat to the greatest extent possible and improve existing roost sites and/or provide new roost sites on buildings or on the Project site. Implement these measures only after consultation with CDFW. d. New roost sites must be in place prior to the initiation of Project-related activities to allow enough time for bats to relocate. e. Design and locate new and enhanced roost sites to be compatible with the bats' search image and habitat requirements (i.e., thermal regulation, interior size, ventilation, etc.). Design new and enhanced roost sites in consultation with CDFW. f. Exclude bats from directly affected work areas selectively and only to the extent necessary to prevent morbidity or mortality to the colony. Use one-way bat exclusion devices, installed in a bat-safe way, to exclude bats and then use steel wool or other method to block the entrance, after the bats have gone. Exclude bats only after consultation with CDFW, at a time that is compatible with the species' normal behavior patterns (i.e., breeding, feeding, hibernating, etc.). In general, exclusions shall not occur during the maternity/pup-rearing season or during the hibernation season, as determined by conditions at the Project site.

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<table>
<tr><th>#</th><th>Environmental Factor</th><th>Mitigation</th></tr>
<tr><td>5.7</td><td>Biological Resources</td><td>
MM 7-10 The Project Applicant/Developer shall preserve grasslands, including native perennial grassland and associated wildflower field vegetation types, at a minimum 2:1 ratio within the ~~approximate 27,408-acre~~ Mmitigation Ppreserve (see Table A). The Project would impact 6,416 acres of grasslands; therefore, a total of 12,832 acres of grassland mitigation acreage is required to bring impacts to a less than significant level.

TABLE A
GRASSLAND MITIGATION ACREAGES
<table>
<tr><th>Mitigation Area</th><th>Grasslands</th><th>Total Acreage</th></tr>
<tr><td colspan="3">On-Site Mitigation Preserve ~~Unimpacted/SEA~~</td></tr>
<tr><td>On-Site Mitigation Preserve ~~Unimpacted/SEA~~</td><td>1,989</td><td>~~3,861~~ 3,866</td></tr>
<tr><td>Subtotal
(Total On-Site Mitigation Area)</td><td>1,989</td><td>~~3,861~~ 3,866</td></tr>
<tr><td colspan="3">Off-Site Mitigation Preserve ~~Open Space~~</td></tr>
<tr><td>Area 1</td><td>~~1,641~~ 1,734</td><td>6,417</td></tr>
<tr><td>Area 2</td><td>~~1,602~~ 1,597</td><td>2,556</td></tr>
<tr><td>Area 3</td><td>~~3,059~~ 0</td><td>4,183</td></tr>
<tr><td>Area 4</td><td>~~4,429~~ 706</td><td>7,319</td></tr>
<tr><td>Area 5</td><td>~~643~~ 0</td><td>643</td></tr>
<tr><td>Area 6</td><td>~~1,012~~ 1,005</td><td>2,429</td></tr>
<tr><td>Area 7</td><td>7,877</td><td>15,668</td></tr>
<tr><td>Subtotal
(Total Off-site Mitigation Area)</td><td>~~12,386~~ 12,919</td><td>~~23,547~~ 39,213</td></tr>
<tr><td>Total Mitigation Area</td><td>~~14,375~~ 14,908**</td><td>~~27,408~~ 43,079</td></tr>
<tr><td colspan="3">~~SEA: Significant Ecological Area~~
**Goal for 2:1 Grassland Mitigation is 12,832 Acres</td></tr>
</table>
Mitigation for loss of those areas modeled as native perennial grassland will provide similar habitat quality as that which was lost. The result shall be native perennial grassland and wildflower field values that are equal to or greater than the overall ecological functions and values of those lost as a result of Project implementation. Preservation shall include dedication and long-term management working towards the goal of a self-sustaining system. Long-term
</td></tr>
</table>

TABLE 1-2
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#	Environmental Factor	Mitigation
		management will include focused major problematic non-native species eradication (e.g., feral pigs) where feasible. Preservation will occur on open space lands on the Project site and on other lands within Tejon Ranch. As outlined in Table A above, the ~~14,375~~ 14,908 acres of grassland preservation will occur in open space areas on site and in the ~~six~~ seven other areas. A full description of these areas is in PDF 7-2. Many of these grassland areas have been part of the expansive grassland studies conducted for the Project over the course of several years. Detailed plot analysis and modeling show the high level of similarity between these preserved grasslands and the grasslands within the Project impact area. In addition, the grasslands are contiguous with other preserved open space in the region and support other important biological functions (e.g., drainages and local wildlife movement pathways). As a result, the preserved grassland is part of a more watershed-level preservation allowing for long-term sustainment and a total value that is greater than the sum of its parts. The preservation phasing through conservation easements shall be based on the percentage of total area of impact per phase of development, regardless of specific resource impacts. The specific location of the acreage to be dedicated within a particular phase will be chosen to maximize the replacement of resource values lost during that phase of construction while maintaining as much contiguous acreage as possible. In order to preserve an adequate quantity of grassland, lands outside the County of Los Angeles, within the County of Kern, would be used for mitigation. As each phase is proposed, a percentage of the mitigation preserve (which is equivalent to the percentage of that phase's impacts) shall be dedicated concurrent with the entitlement approval of that phase. Management of the Mitigation Preserve shall be in accordance with the Ranch-wide Management Plan (RWMP), which incorporates Best Management Practices for grazing, including Residual Dry Matter targets, and weed management, including invasive plant mapping and targeted removal actions (see RWMP Vol. II Sections 5.1 and 5.2). The RWMP includes standards for management of the grassland areas that will preserve the grasslands in perpetuity. The RWMP shall include a Figure depicting the Mitigation Preserve lands used to meet this 2:1 preserve ratio. The ~~open space~~ Mitigation P~~p~~reserve, including the grasslands within it, shall be preserved in perpetuity to offset Project impacts on native grasslands and wildflower fields prior to issuance of a grading permit for the Project site. The phasing of mitigation has been previously described. The preservation and management of these grasslands through the ~~Native Perennial Grassland and Wildflower Field Mitigation Plan~~ RWMP will sufficiently offset and fully mitigate the impacts on native grasslands and wildflower fields associated with the Project.

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CENTENNIAL SPECIFIC PLAN MITIGATION SUMMARY

<table>
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The following further edit was identified subsequent to publication of the Final EIR in May 2018 and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors.

MM 7-10 The Project Applicant/Developer shall preserve grasslands, including native perennial grassland and associated wildflower field vegetation types, at a minimum 2:1 ratio within the Mitigation Preserve (see Table A). The Project would impact 6,416 acres of grasslands; therefore, a total of 12,832 acres of grassland mitigation acreage is required to bring impacts to a less than significant level.

TABLE A
GRASSLAND MITIGATION ACREAGES

Mitigation Area	Grasslands	Total Acreage
On-Site Mitigation Preserve		
On-Site Mitigation Preserve	1,989	3,866
Subtotal (Total On-Site Mitigation Area)	*1,989*	*3,866*
Off-Site Mitigation Preserve		
Area 1	1,734	6,417
Area 2	1,597	2,556
Area 3	0	4,183
Area 4	706	7,319
Area 5	0	643
Area 6	1,005	2,429
Area 7	7,877	15,668
Subtotal (Total Off-site Mitigation Area)	*12,919*	*39,213*
Total Mitigation Area	**14,908****	**43,079**
**~~Goal for~~ 2:1 Grassland Mitigation requirement is 12,832 Acres		

Mitigation for loss of those areas modeled as native perennial grassland will provide similar habitat quality as that which was lost. The result shall be native perennial grassland and wildflower field values that are equal to or greater than the overall ecological functions and values of those lost as a result of Project implementation. Preservation shall include dedication and long-term management working towards the goal of a self-sustaining system. Long-term

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		management will include focused major problematic non-native species eradication (e.g., feral pigs) where feasible. Preservation will occur on open space lands on the Project site and on other lands within Tejon Ranch. As outlined in Table A above, the 14,908 acres of grassland preservation will occur in open space areas on site and in the seven other areas. A full description of these areas is in PDF 7-2. Many of these grassland areas have been part of the expansive grassland studies conducted for the Project over the course of several years. Detailed plot analysis and modeling show the high level of similarity between these preserved grasslands and the grasslands within the Project impact area. In addition, the grasslands are contiguous with other preserved open space in the region and support other important biological functions (e.g., drainages and local wildlife movement pathways). As a result, the preserved grassland is part of a more watershed-level preservation allowing for long-term sustainment and a total value that is greater than the sum of its parts. The preservation phasing through conservation easements shall be based on the percentage of total area of impact per phase of development, regardless of specific resource impacts. The specific location of the acreage to be dedicated within a particular phase will be chosen to maximize the replacement of resource values lost during that phase of construction while maintaining as much contiguous acreage as possible. In order to preserve an adequate quantity of grassland, lands outside the County of Los Angeles, within the County of Kern, would be used for mitigation. As each phase is proposed, a percentage of the mitigation preserve (which is equivalent to the percentage of that phase's impacts) shall be dedicated concurrent with the entitlement approval of that phase. Management of the Mitigation Preserve shall be in accordance with the Ranch-wide Management Plan (RWMP), which incorporates Best Management Practices for grazing, including Residual Dry Matter targets, and weed management, including invasive plant mapping and targeted removal actions (see RWMP Vol. II Sections 5.1 and 5.2). The RWMP includes standards for management of the grassland areas that will preserve the grasslands in perpetuity. The RWMP shall include a Figure depicting the Mitigation Preserve lands used to meet this 2:1 preserve ratio. The Mitigation Preserve, including the grasslands within it, shall be preserved in perpetuity to offset Project impacts on native grasslands and wildflower fields prior to issuance of a grading permit for the Project site. The phasing of mitigation has been previously described. The preservation and management of these grasslands through the RWMP will sufficiently offset and fully mitigate the impacts on native grasslands and wildflower fields associated with the Project.
5.7	**Biological Resources**	**MM 7-11** This measure prescribes mitigation for other special status vegetation types including mixed oak woodland, oak trees, and other riparian and wetland vegetation types. Each of these three vegetation types is discussed separately (native grassland and wildflower fields are addressed in MM 7-10). *Mixed Oak Woodlands* The Project Applicant/Developer shall create mixed oak woodlands to achieve resulting vegetation/habitat values. Since there would be approximately 6.2 acres of oak woodland impacts, mitigation will result in the preservation of a minimum of 6.2 acres of mixed oak woodland and creation of a minimum of 6.2 acres of mixed oak woodland, which

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		will include the establishment[3415] of 322 oak trees completed as part of oak tree replacement in accordance with the County of Los Angeles oak tree permit requirements (see Oak Trees Section below). Oak trees established in created oak woodlands will be credited towards both oak woodland and oak tree mitigation requirements. If Project impacts are reduced through a reduction in Project disturbance limits in oak woodland areas, required mitigation acreage will be reduced accordingly. In accordance with mitigation options outlined in Section 21083.4 of the *California Public Resources Code* (PRC), replacement of oak woodlands shall consist of no greater than ½ of the oak woodland mitigation requirement. Therefore, half of the 6.2 oak woodland impact acreage will be mitigated via the alternate option of preservation. The combined acreage of oak woodland preserved both on site (unimpacted~~/~~ Significant Ecological Area [SEA]) and within the off-site mitigation areas is ~~3,102~~ 3,090 acres and is expected to substantially exceed the required 50 percent of mitigation as preservation. Mitigation through creation is typically implemented on lands with minimal habitat value (e.g., ruderal vegetation, graded slopes) rather than in areas with a substantial component of existing native vegetation. However, evidence of lack of naturally occurring recruitment on site indicates that the existing woodlands are likely to be eventually replaced by non-woodland vegetation. Based on the lack of naturally occurring replacement trees, it is anticipated that oak woodland planting is necessary to sustain the oak woodlands. Therefore, the goal of oak resource mitigation efforts will be to create and enhance oak woodlands. To maximize potential for success, oak woodlands will be created within and adjacent to the same areas where oak woodlands currently exist. This method will create future generations of oak trees and oak woodland on the site in these areas. Details of the oak woodland mitigation program are described below in items 1–10. 1. To mitigate for impacts to oak woodland and oak trees, site-specific native acorns will be collected. Acorns will be collected within the watershed area of the Project site to ensure that acorns collected are of a similar genetic stock to those existing on the site. Some acorns will be planted and maintained in containers, and others will be stored and planted directly on site within the Oak Mitigation Areas. 2. To maximize oak woodland biological values and the potential for long-term success, some locally collected oak acorns will be planted directly into the ground. These acorns will be planted in appropriate locations in the Oak Mitigation Areas. The locations identified for acorn planting will be reviewed by the County Forester. 3. Container plants will be propagated and maintained from locally collected acorns. In this way, more established container plants will be available for mitigation efforts, and they will contain the most suitable genetic variability appropriate for the region to increase mitigation success. The preferred method of propagation will include the establishment of a temporary nursery on the Project site. The nursery will include partial shade areas to reduce water loss and a constant water supply to supplement planted trees. Using the acorns collected from within the

[3415] In Biology, "establish", in this sense, refers to vegetation (including seeds) that has been planted and is becoming a healthy, surviving plant with as much chance to survive as plants that have existed for a long period of time.

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		watershed area of the Project site, container plantings will be cultivated at this location. Development of trees on site will ensure that they are acclimated to the typical weather conditions at their eventual permanent location. If necessary, and in consultation with the County Forester, acorns collected from the site may be stored or propagated and maintained under contract with a reputable native plant nursery off site. 4. To provide overstory, midstory, and understory tree/plant coverage, some container plants and oak trees, grown from locally collected acorns, will be installed in addition to the application of native seed mixes. Since studies indicate that the younger the planting is, the more likely the chance is for successful establishment and long term viability[8] locally collected acorns as well as locally collected, nursery-cultivated young oak trees (one-gallon or five-gallon containers of oaks) would be planted on site. The oak woodland planting and seeding palettes will include a diversity of locally-collected native shrubs, subshrubs, grasses, forbs, and ferns, to provide a beneficial mosaic of understory vegetation. 5. The oak mitigation program will include the extensive salvage (from the impacted oak habitat areas) and placement of coarse woody debris, brush piles, and boulders (as available) to immediately provide (a) suitable micro-habitats for the establishment of plant species with particular shade and moisture requirements (e.g., ferns) and (b) improved habitat resources (e.g., cover) for wildlife species. 6. Irrigation will be provided to the oak plantings in a manner that simulates natural rain events; i.e., infrequent, deep watering. Irrigation will be suspended during periods of substantial rainfall, and irrigation will be terminated at the earliest possible date (depending on seasonal weather patterns) in coordination with the County Forester, to optimize the drought resiliency and proper root development of the planted oaks. Additionally, all irrigation must be terminated for a minimum of five years before the oak mitigation areas will be eligible for final approval/sign-off. ~~5~~ 7. The Project Applicant/Developer will provide an annual report to the County that will include an accounting of each of the following in the mitigation areas: (a) the number of acorns planted; (b) the number of germinated acorns (whether planted or natural) protected; (c) the number of new oak trees planted in mitigation areas, including the species of each tree planted; (d) the caliper of each new tree planted and/or protected; (e) the acreage of woodlands created and/or conserved in the mitigation areas. ~~6~~ 8. Creation of structurally diverse oak woodland habitat within and contiguous to existing oak woodlands will be accomplished by planting locally collected oak acorns, plus yearly sowings of additional locally collected acorns, as well as, temporary irrigation, weed abatement, pest deterrence, and/or other maintenance tasks as needed to facilitate oak seedling germination and survival. ~~7~~ 9. Prior to Project grading, locally collected acorns will be planted and grown. Once trees reach a diameter of one inch just above ground surface (i.e., basal height) within the Oak Tree/Oak Woodland Mitigation Areas, they will be appropriated as "mitigation trees" to be used for oak woodland and oak tree permit mitigation purposes with approval from the County Forester as part of the oak woodland and oak tree permit mitigation process and will

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		be credited as a mitigation tree if the tree is determined to be healthy by the Los Angeles County Forester at the end of the monitoring period. ~~8~~ 10. The required 12.4 acres of mixed oak woodland creation will occur within 473 acres of existing oak woodland (primary area) and 716 acres of adjacent low quality non-native grassland (secondary area, if needed) on the western portion of the Project site. Additional suitable areas may also be identified within reduced grading footprints following final detailed tract map production to the satisfaction of the County Forester. Mitigation planting areas will be refined within the proposed mitigation areas through a multi-variable query of existing Geographical Information System (GIS) data sets, and intensive field analysis to precisely identify suitable planting locations (e.g., localized soil types, microtopography). Created oak woodlands will have an approximate average density of 80 appropriately sized oak trees per acre at the end of the monitoring period (or other density as directed by the County Forester), while staying within the mitigation areas. The contiguity of the created woodland habitat within or adjacent to existing oak woodlands will be ecologically beneficial, and will also improve the logistics of restoration installation, maintenance, and monitoring, compared to a fragmented habitat creation program. These methods will help to ensure the success of created oak woodlands to replace the existing woodlands over time. ~~9~~ 11. In order to implement the creation of habitat on the site and to ensure the persistence of the overall biological functions and values over time, the Project Applicant/Developer shall submit an Oak Woodland Habitat Mitigation Plan to the County for approval prior to the issuance of a grading permit for each tract map or combination of tract maps. The mitigation approach described in the Plan shall comply with Section 21083.4 of the *California Public Resources Code* (PRC), which was enacted by California Senate Bill (SB) 1334. County approval of the Plan shall be required prior to the initiation of any clearing or grading on the site that affects any oak woodland vegetation. The Oak Woodland Habitat Mitigation Plan shall be developed by a qualified Restoration Specialist, to be retained by the Project Applicant/Developer, and shall be subject to County approval. The objective of the Oak Woodland Habitat Mitigation Plan will be to preserve 6.2 acres of existing oak woodland and to create 6.2 acres of oak woodland. The Oak Woodland Habitat Mitigation Plan serves the purpose of satisfying the conditions of Section 21083.4 of the *California Public Resources Code*. ~~10~~ 12. Implementation of the Oak Woodland Mitigation Plan will be the responsibility of the Project Applicant/Developer or its designated party; the Plan shall specify, the following: a. **Planting Management Program:** A Planting Management Program shall be prepared for review by the County Forester that will outline three planting seasons and will include (i) the first planting season, year 0, being the acorn and sun tolerant ground covers; (ii) the second planting season occurring at approximately year 5, introducing sun/shade tolerant species; and (iii) the third planting season at year 10 with the introduction of more shade tolerate understory species, including the use of reference sites.

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		~~a.~~ **b. Personnel:** The responsibilities and qualifications of personnel required to implement and supervise the plan will be specified. The responsibilities of the Landowner, County staff, Specialists, and Maintenance Personnel that will supervise and implement the plan will also be included. ~~b.~~ **c. Site Selection:** The mitigation site(s) will be determined in coordination with the project applicant/Developer and the County. The site(s) will be located in open space areas that will be managed in perpetuity through a conservation easement, open space dedication, performance bond, management at the Tejon Ranch Conservancy, or other method approved by the County Forester. ~~c.~~ **d. Native Species Seed Collection, Site Preparation, and Planting Implementation:** Under the supervision of the County Forester, site preparation will include (i) protection of existing native species; (ii) trash and weed removal; (iii) native species salvage and reuse (i.e., duff); (iv) soil treatments (i.e., imprinting, and/or decompacting); (v) erosion-control measures (i.e., rice or willow wattles); (vi) native seed mix application; and (vii) procedures for native seed collection from the site, including acorns of native oak species. ~~d.~~ **e. Schedule:** Restoration/revegetation sites will be established between October 1 and January 30. Seeding and planting of container plants will take place immediately after preparation of the mitigation sites and will take place under the supervision of the County Forester. ~~e.~~ **f. Maintenance Plan and Guidelines:** The Maintenance Plan, to be approved by the County, will include (i) weed control; (ii) herbivory control (e.g., feral pigs); (iii) trash removal; (iv) irrigation system maintenance; (v) maintenance training; (vi) replacement planting; and (vii) a vehicle washing program to capture invasive propagules. The Maintenance Plan will also indicate who is responsible for each of these listed tasks. ~~f.~~ **g. Monitoring Plan:** The monitoring plan, to be implemented for a 15-year period, and to be approved by the County, will include (i) qualitative monitoring (i.e., photographs and general observations); (ii) yearly quantitative monitoring (i.e., randomly placed transects to assess vegetation type coverage and systematically assess all mitigation oak trees); (iii) performance criteria as approved by the County; and (iv) annual reports that will be submitted to the County for five consecutive years after initial planting (or longer if the County requires) and following plan approval. The Plan shall be prepared by a qualified Restoration Specialist and approved by the County prior to any clearing or grading for any tract map that affects any oak woodland vegetation. ~~g.~~ **h. Long-Term Preservation:** Long-term preservation of the mitigation site(s) will be outlined in the Restoration Plan to ensure that they are not impacted by future development. An open space dedication, conservation easement, performance bond, management by the Tejon Ranch Conservancy, or other County-approved method will be used to ensure long-term preservation.

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		~~h.~~ i. **Growth/Vegetation Standards:** Growth/vegetation standards will be developed by a qualified Biologist in accordance with County and regulatory agency requirements. *Oak Trees* The mitigation approach for replacing lost oak trees shall comply with the County of Los Angeles Oak Tree Ordinance (CLAOTO) requirements. The goal of this program is to replace impacted oak trees at a ratio of 3:1 for non-heritage oaks and 10:1 for heritage oaks in accordance with the County's oak tree permit requirements. This would result in the establishment of 322 oak trees. However, if Project impacts are reduced through a reduction in Project disturbance limits within oak woodland areas, required tree numbers will be reduced accordingly. Mitigation trees are typically planted on lands with minimal habitat value (e.g., ruderal vegetation, graded slopes) rather than in areas with a substantial component of existing native vegetation. To maximize potential for success, oak trees will be planted in the same areas where oak woodlands currently exist. This method will create future generations of oak trees and oak woodland on the site in these areas and will be done as described in Numbers 1–10 under the "Mixed Oak Woodlands" portion above. Additionally, quantitative tree monitoring data for all mitigation trees (whether for County of Los Angeles Oak Tree Ordinance [CLAOTO] mitigation or oak woodland mitigation) will be submitted to the County Forester yearly and, for convenience, will be included as an appendix to the annual report required in 10(f)(ii) above. *Other Riparian and Wetland* In addition, the Project Applicant/Developer shall create, enhance, and/or restore all impacted riparian and wetland vegetation types that are not considered jurisdictional by permitting resource agencies (i.e., those not mitigated through regulatory permit conditions) at a 1:1 ratio. This applies to areas mapped as alluvial scrub; riparian herb; rush riparian grassland; southern arroyo willow riparian; southern willow scrub; unvegetated wash; willow riparian forest; willow riparian woodland; alkali meadow; Baltic rush; and seeps and ephemeral ponds. These areas shall be included in the Streambed and Wetland Habitat Creation and Enhancement Plan discussed in MM 7-12, which shall be approved by the County prior to issuance of grading permits. Consultation with representatives from the Angeles National Forest regarding oak and grasslands mitigation activities in SEA 17 shall occur prior to the commencement of oak tree planting in SEA 17.

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5.7	**Biological Resources**	**MM 7-12** Prior to any fill of or alteration to drainage tributaries, wetlands, and/or riparian vegetation on the Project site, the Project Applicant/Developer shall obtain the appropriate regulatory agency permits and/or agreements from the U.S. Army Corps of Engineers (USACE), the California Department of Fish and Wildlife (CDFW), and the applicable Regional Water Quality Control Board (RWQCB). The Project Applicant/Developer shall comply with all construction mitigation measures specified in the EIR, regulatory agency permits, and/or agreements. Pursuant to the permit requirements, the Project Applicant/Developer will develop a Storm Water Pollution Prevention Plan (SWPPP) that incorporates Best Management Practices (BMPs) for reducing or eliminating construction-related pollutants in the site runoff. The Project is subject to the following Mitigation Performance Standards: As anticipated to be required by USACE, CDFW, and Regional Water Quality Control Board (RWQCB) regulatory permits, the Project Applicant/Developer shall create, enhance, and/or restore acreage to ensure that net habitat values are at least equal to those lost from Project implementation. Mitigation ratios are typically specified in the regulatory permits. However, if mitigation is conducted prior to impacts taking place, mitigation ratios can be pro-rated; this type of mitigation pro-rating allows time to evaluate if created, enhanced, and/or restored habitat values are at least equal to those that will eventually be lost from Project implementation. Under this scenario, it can be verified that the restoration/creation goals have been accomplished or are proceeding satisfactorily. The extent of drainages and wetlands that would be preserved under the Project will provide opportunities to expand and enhance the drainages, wetlands, and riparian vegetation throughout the Mitigation Preserve ~~on the Project site~~. As discussed previously, a wetland functional assessment of the drainages and other aquatic features in the Project site was conducted by Glenn Lukos Associates in 2006 and 2009 in order to characterize and evaluate the functions of the site's drainages and riparian habitats (GLA 2009a). An update to that functional assessment was conducted in 2015 (BonTerra Psomas 2015a). Overall, aquatic resources on the site were evaluated in terms of Functional Capacity Units (FCU), which indicate more specifically the mitigation level necessary to restore riparian functions after Project implementation by providing a measure of the ability of a wetland area to perform typical wetland functions. The purpose of the mitigation is to replace lost habitat value, as measured in FCU (or other acceptable functional value units) rather than based on a standard acreage ratio. Alternatively, a more traditional mitigation ratio approach may be employed using following rates: a. Wetland Waters: 2:1, including 1:1 restoration and 1:1 enhancement, of wetland waters. b. Streams: i. 1:1 preservation of ephemeral and/or intermittent streams for permanent impacts to ephemeral non-wetland waters of the state (non-riparian) ii. 1:1 preservation of intermittent streams for permanent impacts to intermittent non-wetland waters of the state (non-riparian)

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		iii. 1:1 restoration of intermittent streams for temporary impacts to intermittent non-wetland waters of the state (non-riparian) c. Riparian Vegetation: 2:1, including 1:1 restoration and 1:1 enhancement of riparian vegetation. Mitigation will include a combination of on-site and off-site preservation of jurisdictional resources; on-site and off-site enhancement/restoration of preserved jurisdictional resources in order to increase overall functional capacity; and the creation (expansion) of riparian/wetland habitats along degraded drainages, including Oso Creek and two of its tributaries in addition to the three other drainages (including the main drainage located along and immediately north of State Route [SR] 138). The direct and indirect loss in on-site functional units will be mitigated through passive enhancement of open space areas, active enhancement of 6.5 acres of wetland, and creation of approximately 78.4 acres of wetland/riparian habitat (GLA 2009a). Following implementation of mitigation, the Project provides approximately 4,748.5 FCUs. Therefore, the proposed mitigation will result in a functional gain of 327.5 FCUs, thereby ensuring a net increase in functionality in the post-Project condition (GLA 2009a). In summary, implementation of the proposed jurisdictional resource mitigation will actually result in a net gain in the measurable functional capacity and therefore, the habitat values, of the on-site and off-site drainages and other aquatic features.[3416] To implement the creation/restoration/enhancement of streambed/wetland habitats on the site, the Project Applicant/Developer shall develop a Streambed and Wetland Habitat Creation and Enhancement Plan commensurate with regulatory agency permits and/or agreements. The purpose of this plan is to demonstrate the feasibility of creating the required mitigation acreage and to ensure that the overall biological functions and values are increased. The plan shall be developed by a qualified Restoration Specialist and shall be submitted ~~to the County for approval~~ and approved by the County and CDFW, and RWQCB prior to grading that would impact jurisdictional waters or wetlands. The Streambed and Wetland Habitat Creation and Enhancement Plan shall specify the following for each tentative tract map area: • **Statement of Impacts:** A statement of impacts and avoidance shall be prepared, including temporary and permanent impacts. • **Personnel:** Responsibilities and qualifications of the personnel required to implement and supervise the plan will be specified. The responsibilities of the Landowner, Specialists, and Maintenance Personnel that will supervise and implement the plan will also be included. • **Site Selection:** Identification of preservation, enhancement and/or creation sites on Mitigation Preserve shall be included. A summary of location of preserved wetlands and/or waters required to achieve applicable preservation performance standards shall also be included. The sites for mitigation will be determined through

[3416] For information about the functional values of the impacted jurisdictional resources and proposed mitigation areas, see GLA 2009b in Appendix 5.7-B.

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		coordination between the project applicant/Developer, the USACE, the CDFW, the applicable RWQCB, and the County. • **Site Preparation and Planting Implementation:** Site preparation will include: (1) protection of existing native species; (2) trash and weed removal; (3) native species salvage and reuse (i.e., duff); (4) soil treatments (i.e., imprinting and/or decompacting); (5) fencing, grading and contouring to improve topographic heterogeneity and floodplain benching, erosion-control measures (i.e., rice or willow wattles); (6) seed mix application and quantities; and (7) procedures for seed collection from existing habitat on the site. Implementation procedures such as mulching will also be included. • **Schedule:** Establishment of restoration/revegetation sites will be conducted between October 1 and January 30. Seeding and planting of container plants will take place immediately after preparation of the restoration sites. • **Maintenance Plan/Guidelines:** The maintenance plan will include (1) weed control; (2) herbivory control; (3) trash removal; (4) irrigation system maintenance; (5) maintenance training; (6) replacement planting; ~~and~~ (7) vehicle washing program to capture invasive propagules; and (8) pest management. • **Monitoring Plan:** The monitoring plan will include (1) qualitative monitoring (i.e., photographs and general observations); (2) quantitative monitoring (i.e., randomly placed transects); (3) vegetation performance success criteria, as approved by the USACE, the CDFW, and the applicable RWQCB [including success for species richness: (≥10), native vegetative cover (≥70 percent) and invasive species (≤5 percent)]; (4) biannual reports (i.e., two reports the first year) for the first year will be submitted to the USACE, the CDFW, the applicable RWQCB; and (5) annual reports, which will be submitted to all three agencies and the County for an additional four years after initial planting. The monitoring is planned for five years, but may be shorter or longer depending upon the performance of the mitigation sites. • **Long-Term Preservation:** Long-term preservation of the mitigation sites will be outlined in the mitigation plan to ensure that they are not impacted by future development. An open space dedication, conservation easement, performance bond, management by the Tejon Ranch Conservancy, or other County-approved method will be used to ensure long-term preservation. • **Performance Standards:** A statement of mitigation performance standard being met (functional value or acreage ratio) shall be included. These will be developed by conducting a biological functions and values assessment (using an accepted method such as Hydrogeomorphic Modeling [HGM]) to establish a baseline for the overall biological value of the affected streambeds and riparian areas on the site. Revegetation will be considered successful at five years if the percent cover and species diversity of the restored and/or created habitat areas are similar to percent cover and species diversity of adjacent existing habitats, as determined by quantitative testing of existing, restored, and created habitat areas [for species richness (≥10), native vegetative cover (≥70 percent) and invasive species (≤5 percent)]. Contingency measures shall also be described in the event that mitigation efforts are not successful. • **Temporary Impacts**: standards for minimizing and restoring temporary impacts, which include recontouring and erosion control for intermittent channels and reseeding requirements for riparian vegetation areas.

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		• **Cattle Exclusion Methods:** Measures to exclude cattle from habitat creation areas and enhancement areas (where applicable) shall be identified and described. • **Funding:** The funding source(s) for all proposed mitigation actions shall be identified. The Streambed and Wetland Habitat Creation and Enhancement Plan shall be subject to approval by the County, the USACE, the CDFW, and the applicable RWQCB for impacts within the respective jurisdictional areas of these agencies. If pro-rated mitigation ratios are used, it shall be demonstrated that the mitigation performance standards have been accomplished. The accomplishment shall be verified by the USACE, the CDFW, and the applicable RWQCB based on the performance standards established above prior to the County's issuance of a grading permit. Implementation of these mitigation measures may serve the dual purpose of satisfying the conditions (or a portion of the conditions) of the agreements/permits of the USACE, the CDFW, and the applicable RWQCB.
5.7	**Biological Resources**	**MM 7-13** The Project Applicant/Developer shall develop a Landscaping Plan for review and approval by the County Biologist. The Landscaping Plan shall be (1) prepared by a qualified biologist; (2) submitted to the County for approval with each tentative map; (3) provided to builders; (4) provided to future project occupants as described in the Specific Plan; and (5) ~~which~~ includes a plant palette composed of non-invasive species that are adapted to the conditions found on the Project site and do not require high irrigation rates. The Landscaping Plan will also include a list of invasive plant species prohibited from being planted on the Project site. In addition, retail sales of these invasive plant species will be prohibited at any businesses (nurseries) located within the Project site. Landscape plans shall encourage planting of local natives typical of native vegetation within ten miles of the Project site. The Homeowners Association shall supply future residents of the Project site with the list of invasive plant species from the Landscaping Plan that will be prohibited from being planted on the Project site and educational materials that emphasize the importance of adhering to the list. A list of local native plants shall be provided to homeowners.
5.7	**Biological Resources**	***The following further edit was identified subsequent to publication of the Final EIR in May 2018 and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors.*** **MM 7-13** The Project Applicant/Developer shall develop a Landscaping Plan for review and approval by the County Biologist. The Landscaping Plan shall be (1) prepared by a qualified biologist; (2) submitted to the County for approval with each tentative map; (3) provided to builders; (4) provided to future project occupants as described in the Specific Plan; and (5) includes a plant palette composed of non-invasive species that are adapted to the conditions found on the Project site and do not require high irrigation rates. The Landscaping Plan will also include a list of invasive plant species prohibited from being planted on the Project site. In addition, retail sales of these invasive plant species will be prohibited at any businesses (nurseries) located within the Project site. Landscape plans shall encourage planting of local natives typical of native vegetation within ten miles of the Project site. The Homeowners Association shall supply future residents of the Project site with the list of invasive plant species from the Landscaping Plan that will be prohibited from being planted on the Project site and educational materials that emphasize the importance of adhering to the list. The prohibition shall be clearly described and distributed to home

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		buyers through their home purchase contacts and CC&Rs. A list of local native plants and educational materials shall be provided to homeowners and shall be posted on the community intranet.
5.7	Biological Resources	**MM 7-14** The designated SR-138 underpass shall be located where the highway crosses the Project's western border near the current intersection with Cement Plant Road. The width of the underpass shall be 100 feet as it passes under SR-138 and shall flare out on both sides of the highway as it moves away from SR-138 to a 150-foot width in the Project open space adjacent to the highway. These specifications are expected to allow some local wildlife to safely pass between open space areas on opposite sides of the highway. In addition, a 50-foot open space buffer will be incorporated on the eastern and western sides of Cement Plant Road; this buffer shall be from the southern side of the bridge that spans the California Aqueduct to the nearest open space polygon that meets the property edge. The undeveloped 50-foot buffer shall run parallel with the Aqueduct along its southern bank. This buffer may be temporarily disturbed during construction, but shall be retained as greenspace to increase connectivity for local wildlife between open space areas and potential Aqueduct crossing locations.
5.7	Biological Resources	**MM 7-15** Waste and recycling receptacles that discourage foraging by wildlife species adapted to urban environments shall be installed by the Project Applicant/Developer in common areas (i.e., any area where public trash receptacles would be placed, such as parks, sidewalks, community centers, and walking trails) throughout the Project site. Common, residential, and commercial areas will all be served with wildlife resistant trash receptacles. Documentation of the completion of this measure shall be submitted to the County prior to occupation of housing units. The Homeowners Association shall supply an educational pamphlet to future residents of the Project site regarding: the importance of not feeding wildlife; information stating that trash (containing food) and microtrash that could potentially attract condors should not be accessible to wildlife; the necessity of keeping the ground free of fallen fruit from trees; and instructions about not leaving pet food outside. Additionally, in order to minimize impacts on native wildlife, the use of rodenticides on the Project site shall be prohibited. All vertical open pipes used for fence posts, property line stakes, signs, roof veneration, chimneys, vault toilets, and similar structures and metal fence stakes used on the Project site shall be capped. Capping can be accomplished using bolts or other materials to avoid raptor talons becoming entrapped within the bolt holes of metal fence stakes.
5.7	Biological Resources	***The following further edit was identified subsequent to publication of the Final EIR in May 2018 and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors.*** **MM 7-15** Waste and recycling receptacles that discourage foraging by wildlife species adapted to urban environments shall be installed by the Project Applicant/Developer in common areas (i.e., any area where public trash receptacles would be placed, such as parks, sidewalks, community centers, and walking trails) throughout the Project site. Common, residential, and commercial areas will all be served with wildlife resistant trash receptacles. Documentation of the completion of this measure shall be submitted to the County prior to occupation of housing units. The Homeowners Association shall post the information on the community intranet and shall supply an educational

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#	Environmental Factor	Mitigation
		pamphlet to future residents of the Project site regarding: the importance of not feeding wildlife; information stating that trash (containing food) and microtrash that could potentially attract condors should not be accessible to wildlife; the necessity of keeping the ground free of fallen fruit from trees; and instructions about not leaving pet food outside. Additionally, in order to minimize impacts on native wildlife, the use of rodenticides on the Project site shall be prohibited. The prohibition shall be clearly described and distributed to home buyers through their home purchase contracts and CC&Rs. All vertical open pipes used for fence posts, property line stakes, signs, roof veneration, chimneys, vault toilets, and similar structures and metal fence stakes used on the Project site shall be capped. Capping can be accomplished using bolts or other materials to avoid raptor talons becoming entrapped within the bolt holes of metal fence stakes.
5.7	**Biological Resources**	**MM 7-16** All landscaping materials (including organic mulches) for common/public areas (i.e., parks and intervening unpaved areas which are not a part of any homeowner's parcel) shall be inspected and certified by landscape suppliers as being "free" of Argentine ants prior to planting. Additionally, container plants and other landscaping materials to be installed within common/public areas within 200 feet of the open space areas shall be inspected by a qualified restoration specialist for the presence of Argentine ants. Plants or other materials with Argentine ants shall be rejected. Upon initiating landscaping within a development area, quarterly monitoring shall be initiated for Argentine ants along the development/construction–open space interface at sentinel locations where invasions could occur (e.g., where moist microhabitats that attract Argentine ants may be created). A qualified biologist shall determine the monitoring locations. Ant pitfall traps will be placed in these sentinel locations and operated on a quarterly basis to detect invasion by Argentine ants. If Argentine ants are detected during monitoring, direct control measures will be implemented immediately to help prevent the invasion from worsening. These direct controls may include but are not limited to nest/mound insecticide treatment, or available natural control methods being developed. A general reconnaissance of the infested area would also be conducted to identify and correct the possible source of the invasion, such as uncontrolled urban runoff, leaking pipes, or collected water. Each site visit shall be followed up with a summary monitoring report sent electronically to Applicant indicating the status of the site. Monthly monitoring reports, as needed, shall be submitted to CDFG and the County of Los Angeles). Monitoring reports shall include remedial recommendations and issue resolution discussions when necessary. Monitoring and control of Argentine ants would occur for a 5-year period. After the first 5 years, the Homeowners Association or other entity will be responsible for controlling Argentine ants. Additionally, to further guard against Argentine ants, the Homeowners Association shall discourage irrigated landscape planting through distribution of educational information and other feasible methods to reduce the potential for importing Argentine ants. To preclude the invasion of Argentine ants into preserved populations of round leaved filaree and crownscale and their associated buffers, controls will be implemented using an integrated pest management (IPM) approach. The controls include (1) Providing "dry zones" between development and round leaved filaree and crownscale populations, where typical soil moistures are maintained at levels below about 10% soil saturation, which will deter the establishment of nesting colonies of ants; and providing dry zone buffers of sufficient width to reduce the potential for Argentine ant

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#	Environmental Factor	Mitigation
		activity within core habitat areas; (2) Where feasible, and/or appropriate, dry areas such as parking lots and roadways shall be built adjacent to the boundaries of these populations; (3) designing adjacent areas to slope away from the preserved populations to avoid runoff entering the area; (4) Pedestrian pathways placed next to preserve populations shall consist of decomposed granite or other gravel to minimize the holding of moisture, thereby preventing establishment of suitable habitat for Argentine ant colonies; (5) Ensuring that all landscape container plants ~~installed within 200 feet of preserved populations~~ are ant free prior to installation to reduce the chance of colonies establishing in areas close to the preserved populations; (6) Maintaining natural hydrological conditions in the preserved populations areas, including the buffers, through project design features for roadways, French drains, irrigation systems, underground utilities, drainage pipes and fencing, storm drains, and any other BMP measures that apply to surface water entering the preserved populations areas; (7) Using drought resistant plants in fuel modification zones and minimizing irrigation to the extent feasible. Similarly, to preclude the invasion of Argentine ants into Mitigation Preserve lands, "dry zones" of a minimum of 350 feet shall be established between development and the Mitigation Preserve. Soil moistures shall be maintained at levels below about 10 percent soil saturation within dry zones to deter the establishment of nesting colonies of ants. All landscaping materials to be used in these zones shall be inspected and certified as "free" of Argentine ants prior to planting. Additionally, these materials shall be inspected by a qualified restoration specialist for the presence of Argentine ants. Plants or other materials with Argentine ants shall be rejected. To prevent the establishment of invasive aquatic wildlife such as the American bullfrog (*Lithobates catesbeianus*) and the African clawed frog (*Xenopus laevis*), all Project flood control and other water retention features shall be monitored seasonally and following rain fall events to confirm pooling does not persist for more than 15 days. If such pooling beyond 15 days is detected, including, for example, in artificially created fishing/casting ponds which can only be constructed following issuance of a conditional use permit and further environmental review, the constructed pond location shall be checked routinely for presence of aquatic invasive wildlife by a qualified biologist until the unexpected pooling no longer persists. If detected, eradication measures to remove all invasive aquatic wildlife shall be implemented by the qualified biologist and may include one or more techniques, including trapping, pithing, and pellet shooting.

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#	Environmental Factor	Mitigation
5.7	**Biological Resources**	**MM 7-17** The Project Applicant/Developer shall implement a public awareness program (prior to the first occupancy permit) in an effort to restrict public access to the riparian and open space areas on the Project site to designated trails and to prevent unleashed domestic animals from entering these areas. The program's educational materials shall discuss the presence of native animals (e.g., coyote, bobcat, and mountain lion), indicate that those native animals could prey on pets, indicate that no actions shall be taken against native animals should they prey on pets allowed outdoors, and indicate that pets must be leashed while using the designated trail system and/or in any areas within or adjacent to open space. The educational materials shall also discuss the impacts pets can have on native birds. Control of stray and feral cats and dogs will be conducted in open space areas on an as-needed basis. Feral cats and dogs may be trapped and deposited with the local Society for the Prevention of Cruelty to Animals or the Los Angeles County Department of Animal Control. This program shall include signs that identify the boundaries of ecologically sensitive areas (including the avoided special status plant populations described in MM 7-1); the use of temporary, wildlife-friendly fencing around sensitive areas that appear to be receiving a high level of disturbance until the disturbance is reversed; and promotion of public education and awareness of such areas. In addition to signage being located along the boundaries of the Mitigation Preserve, signage denoting the boundaries of ecologically sensitive areas and other pertinent information shall be included along the Pacific Crest Trail where it overlaps the Mitigation Preserve. The Project Applicant/Developer shall be responsible for the initial development of the public awareness program and installation of interpretive signs and wildlife-friendly fencing. The Homeowners Association, the Project Applicant/Developer, or an acceptable Land Manager/Agency (as approved by the County) shall be responsible for maintaining this program, including signs and wildlife-friendly fencing. Only passive recreational activities shall be permitted within the designated natural open space areas and shall be restricted to trails. Some areas may allow slightly greater impacts if designated as picnic and/or camping areas. Domestic cats shall be prohibited from free-roaming (i.e., be allowed outdoors), and shall be required to have a microchip. All dogs shall be required to be leashed while in the designated natural open space areas, and bags for removing pet excrement will be provided at trail entrances and other appropriate locations. In addition, all dogs and cats shall be required to be neutered or spayed; all dogs shall be required to have a microchip; and potential owners shall show evidence prior to entry into the Centennial Development, as required by Los Angeles County Code (Section 10.20.350). These restrictions/features and their purpose will be described within educational material and distributed to new homeowners and made available to all homeowners as needed.

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#	Environmental Factor	Mitigation
5.7	**Biological Resources**	***The following further edit was identified subsequent to publication of the Final EIR in May 2018 and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors.*** **MM 7-17** The Project Applicant/Developer shall implement a public awareness program (prior to the first occupancy permit) in an effort to restrict public access to the riparian and open space areas on the Project site to designated trails and to prevent unleashed domestic animals from entering these areas. The program's educational materials shall discuss the presence of native animals (e.g., coyote, bobcat, and mountain lion), indicate that those native animals could prey on pets, indicate that no actions shall be taken against native animals should they prey on pets allowed outdoors, and indicate that pets must be leashed while using the designated trail system and/or in any areas within or adjacent to open space. The educational materials shall also discuss the impacts pets can have on native birds. Control of stray and feral cats and dogs will be conducted in open space areas on an as-needed basis. Feral cats and dogs may be trapped and deposited with the local Society for the Prevention of Cruelty to Animals or the Los Angeles County Department of Animal Control. This program shall include signs that identify the boundaries of ecologically sensitive areas (including the avoided special status plant populations described in MM 7-1); the use of temporary, wildlife-friendly fencing around sensitive areas that appear to be receiving a high level of disturbance until the disturbance is reversed; and promotion of public education and awareness of such areas. In addition to signage being located along the boundaries of the Mitigation Preserve, signage denoting the boundaries of ecologically sensitive areas and other pertinent information shall be included along the Pacific Crest Trail where it overlaps the Mitigation Preserve. The Project Applicant/Developer shall be responsible for the initial development of the public awareness program and installation of interpretive signs and wildlife-friendly fencing. The Homeowners Association, the Project Applicant/Developer, or an acceptable Land Manager/Agency (as approved by the County) shall be responsible for maintaining this program, including signs and wildlife-friendly fencing. Only passive recreational activities shall be permitted within the designated natural open space areas and shall be restricted to trails. Some areas may allow slightly greater impacts if designated as picnic and/or camping areas. Domestic cats shall be prohibited from free-roaming (i.e., be allowed outdoors), and shall be required to have a microchip. All dogs shall be required to be leashed while in the designated natural open space areas, and bags for removing pet excrement will be provided at trail entrances and other appropriate locations. In addition, all dogs and cats shall be required to be neutered or spayed; all dogs shall be required to have a microchip; and potential owners shall show evidence prior to entry into the Centennial Development, as required by Los Angeles County Code (Section 10.20.350). These restrictions/features and their purpose will be described within educational material and distributed to new homeowners ~~and~~, shall be posted on the community intranet, made available to all homeowners as needed, and shall be clearly described and distributed to home buyers through their home purchase contracts and CC&Rs.

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#	Environmental Factor	Mitigation
5.7	**Biological Resources**	**MM 7-18** Common area landscaping and restoration methods shall follow protocols to reduce the potential for the introduction of pathogens and pests into the Project site and to reduce the spread of pathogens and pests outside the Project site (should they inadvertently be introduced). Protocols for reducing the potential for introduction of pathogens and pests into the site via plant foliage/soil from nurseries supplying the material shall include the following anti-contamination procedures: sanitizing all containers, tools, and footwear (boots, pots, clippers, soil scoops, shovels) in soil potting areas; sanitizing all transplanting and prep tables; sanitizing plant storage locations (e.g., benches); sanitizing plant transportation devices (e.g., carts); sanitizing floor surfaces where plants are stored on a regular basis; and using anti-splash watering methods for particularly susceptible plant species. Field installation crews shall sanitize all tools and footwear during landscaping and restoration activities prior to using them or entering the site and shall install plants in a way that minimizes conditions that support pathogens and pests (e.g., minimizing standing water). All plant materials brought onto the site will be inspected by landscape/restoration personnel familiar with signs of pathogen and pest infestation. Should pathogens or pests be detected, the infected material shall be bagged, secured, and disposed of off-site to a contained location. Long-term control methods shall include monitoring to examine vegetation and surrounding areas for pests to evaluate trends and to identify when controls are needed; establishing action thresholds that trigger control actions; and implementing pest control methods—cultural, mechanical, environmental, and biological—and appropriate pesticides.
5.7	**Biological Resources**	**MM 7-19** Prior to vegetation clearing or grading, additional surveys shall be performed to confirm that all oak trees within the impact and buffer areas are recorded. The Project Applicant/Developer will be required to comply with all mitigation measures stipulated in the County-issued Oak Tree Permit pursuant to the County of Los Angeles Oak Tree Ordinance (CLAOTO) and the *County of Los Angeles Oak Woodlands Conservation Management Plan* (OWCMP). Trees would be planted pursuant to the Oak Woodland Restoration Plan discussed in MM 7-11.
5.7	**Biological Resources**	**MM 7-20** All oak tree driplines within 50 feet of land clearing (including brush clearing) or areas to be graded shall be enclosed with temporary fencing for the duration of the clearing or grading activities. Fencing shall extend to the root protection zone (RPZ) (that area at least 15 feet from the trunk or half again as large as the distance from the trunk to the dripline, whichever is greater). No parking or storage of equipment, solvents, or chemicals that could adversely affect the trees shall be allowed within 25 feet of the trunk at any time. Fence removal shall occur only after the Project Biologist confirms the health of preserved trees. All upslope grading and drainage shall be engineered to minimize resultant erosion, soil compaction, or drainage into preserved oak tree areas. Whenever possible, utilities shall be designed to avoid crossing under the canopies of preserved trees unless the utilities are installed by drilling under the root zones (where feasible) in order to avoid impacts associated with cutting roots. Feasibility of drilling under trees will be based on soil conditions. Utilities will be clustered whenever possible to lessen impacts to oak RPZs.

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#	Environmental Factor	Mitigation
5.7	**Biological Resources**	**MM 7-21** In order to ensure that no direct impacts to Significant Ecological Area (SEA) 17 occur, brush clearance zones shall be contained within the current Project impact boundary and no overlap with the adjacent SEA 17 shall occur. Vegetation management for fire abatement purposes is not authorized in SEA areas. An Implementation Plan, including fire risk abatement measures (including but not limited to vegetation management) required to comply with State and County fire prevention and response legal requirements, shall be submitted as part of the tentative tract map for portions of the Project site that border an SEA or mitigation preserve area. The Plan shall include: (a) a summary of applicable State and County fire risk abatement requirements; (b) a prohibition on the use of vegetation clearance within SEA 17 or mitigation preserve areas. The Plan shall be submitted to the County for approval with the first tentative map, and shall be updated to include new or modified State or County fire risk abatement requirements as part of each subsequent tentative tract map submittal. ~~The Plan shall include this prohibition on vegetation clearance within these biologically sensitive areas.~~
5.7	**Biological Resources**	**MM 7-22** If a golf course is developed as part of Project implementation, the Project Applicant/Developer shall prepare a Golf Course Management Plan that requires any golf course developed on the site to incorporate the design and management measures consistent ~~be built and managed in accordance~~ with the Audubon Cooperative Sanctuary Program for Golf Courses (or equivalent), which is a cooperative effort between the United States Golf Association and Audubon International that is designed to promote ecologically sound land management and to conserve natural resources (see Final EIR Appendix 5.7-E). The Plan shall be submitted to the County for approval with any tentative map that includes a golf course.
5.7	**Biological Resources**	**MM 7-23** Notwithstanding any provision of the Centennial Specific Plan to the contrary, land designated by the Centennial Specific Plan as On-Site Mitigation Preserve, Off-Site Mitigation Preserve, Disturbed Green Space, and Undisturbed Green Space shall only be used in a manner consistent with the following land use restrictions: On-Site Mitigation Preserve: Uses within the On-site Mitigation Preserve shall be restricted to use and continued maintenance of existing ranch roads and trails for access as well as hiking and biking for private inholding owners and permitted Ranch guests. Public access and recreational hunting shall be prohibited. Authorized motorized vehicles including but not limited to Tejon Ranch employees, utility maintenance vehicles, that have a Tejon Ranch permit and emergency vehicles shall be restricted to existing ranch roads and all recreational motorized vehicles shall be prohibited. No improvements beyond what is necessary to maintain roads, fences, etcetera, in their current state shall be allowed, with the exception of the placement of two new water towers discussed below. Only habitat enhancement, restoration and creation activities approved by the County and described in the Mitigation Preserve Management Plan shall be permitted. New impacts shall be limited to the placement of two water towers with disturbance impacts of no more than five acres each. Grazing shall be allowed to continue as directed by the Mitigation Preserve Management Plan strictly for resource management values. Off-Site Mitigation Preserve: Uses within the Off-site Mitigation Preserve shall be restricted to use and continued maintenance of existing ranch roads and trails for access as well as hiking and biking for private inholding owners and permitted Ranch guests. Public access shall be prohibited. Authorized motorized vehicles including but not limited to Tejon Ranch employees, utility maintenance vehicles, that have a Tejon Ranch permit and emergency vehicles shall be

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#	Environmental Factor	Mitigation
		restricted to existing ranch roads and all recreational motorized vehicles shall be prohibited. No improvements beyond what is necessary to maintain roads, fences, etcetera, in their current state shall be allowed, Recreational hunting shall be restricted to Ranch authorized individuals and within designated hunting areas only. Only habitat enhancement, restoration and creation activities approved by the County and described in the Mitigation Preserve Management Plan shall be permitted. Grazing shall be allowed to continue as directed by the Mitigation Preserve Management Plan strictly for resource management values. Disturbed Green Space: Uses within Disturbed Green Space shall be restricted to one or more of the following: golf course, equestrian, natural parks, trails, cultural monuments, water retention basins, open space uses, utilities, grading, crop production, grazing, special events, and mitigation activities. Undisturbed Green Space: Uses within Undisturbed Green Spaces shall be restricted to one or more of the following: continued maintenance of existing ranch roads and trails for access as well as hiking and biking for private inholding owners and permitted Ranch guests. Public access and recreational hunting shall be prohibited. Authorized motorized vehicles including but not limited to Tejon Ranch employees, utility maintenance vehicles, that have a Tejon Ranch permit and emergency vehicles shall be restricted to existing ranch roads and all recreational motorized vehicles shall be prohibited. Restricted access signage shall be posted along interface with public areas. Wildlife friendly fencing will be used to demarcate the edge of restricted access green space.
5.7	**Biological Resources**	***The following further edit was identified subsequent to publication of the Final EIR in May 2018 and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors.*** **MM 7-23** Notwithstanding any provision of the Centennial Specific Plan to the contrary, land designated by the Centennial Specific Plan as On-Site Mitigation Preserve, Off-Site Mitigation Preserve, Disturbed Green Space, and Undisturbed Green Space shall only be used in a manner consistent with the following land use restrictions: On-Site Mitigation Preserve: Uses within the On-site Mitigation Preserve shall be restricted to use and continued maintenance of existing ranch roads and trails for access as well as hiking and biking for private inholding owners and permitted Ranch guests. Public access and recreational hunting shall be prohibited. Authorized motorized vehicles including but not limited to Tejon Ranch employees, utility maintenance vehicles, that have a Tejon Ranch permit and emergency vehicles shall be restricted to existing ranch roads and all recreational motorized vehicles shall be prohibited. No improvements beyond what is necessary to maintain roads, fences, etcetera, in their current state shall be allowed, with the exception of the placement of two new water towers discussed below. Only habitat enhancement, restoration and creation activities approved by the County and described in the Ranch-wide ~~Mitigation Preserve~~ Management Plan shall be permitted. New impacts shall be limited to the placement of two water towers with disturbance impacts of no more than five acres each. Grazing shall be allowed to continue as directed by the Mitigation Preserve Management Plan strictly for resource management values. Off-Site Mitigation Preserve: Uses within the Off-site Mitigation Preserve shall be restricted to use and continued maintenance of existing ranch roads and trails for access as well as hiking and biking for private inholding owners and

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#	Environmental Factor	Mitigation
		permitted Ranch guests. Public access shall be prohibited. Authorized motorized vehicles including but not limited to Tejon Ranch employees, utility maintenance vehicles, that have a Tejon Ranch permit and emergency vehicles shall be restricted to existing ranch roads and all recreational motorized vehicles shall be prohibited. No improvements beyond what is necessary to maintain roads, fences, etcetera, in their current state shall be allowed, Recreational hunting shall be restricted to Ranch authorized individuals and within designated hunting areas only. Only habitat enhancement, restoration and creation activities approved by the County and described in the Ranch-wide ~~Mitigation Preserve~~ Management Plan shall be permitted. Grazing shall be allowed to continue as directed by the Ranch-wide ~~Mitigation Preserve~~ Management Plan strictly for resource management values. Disturbed Green Space: Uses within Disturbed Green Space shall be restricted to one or more of the following: golf course, equestrian, natural parks, trails, cultural monuments, water retention basins, open space uses, utilities, grading, crop production, grazing, special events, and mitigation activities. Undisturbed Green Space: Uses within Undisturbed Green Spaces shall be restricted to one or more of the following: continued maintenance of existing ranch roads and trails for access as well as hiking and biking for private inholding owners and permitted Ranch guests. Public access and recreational hunting shall be prohibited. Authorized motorized vehicles including but not limited to Tejon Ranch employees, utility maintenance vehicles, that have a Tejon Ranch permit and emergency vehicles shall be restricted to existing ranch roads and all recreational motorized vehicles shall be prohibited. Restricted access signage shall be posted along interface with public areas. Wildlife friendly fencing will be used to demarcate the edge of restricted access green space.
5.10	**Traffic, Access and Circulation**	**MM 10-1** The Project shall provide internet infrastructure and a community intranet with access for homeowners associations; interest groups; local event scheduling; schools, library, carpool and transit services; and other on-site entertainment and amenities for residential land uses. The internet and intranet will reduce the need for people to use automobile travel to obtain the information that is provided by both. The intranet shall also provide education about greenhouse gas (GHG) emissions; GHG reduction opportunities; energy and water conservation opportunities; financial incentives (e.g., rebates and low-interest loans) for energy-efficiency improvements; and energy-efficiency technology systems, including those suitable for large commercial and industrial users.
5.10	**Traffic, Access and Circulation**	**MM 10-2** The Project Applicant/Developer shall submit a traffic study that addresses site access and local circulation in accordance with the County of Los Angeles Department of Public Works Traffic Impact Analysis Report Guidelines. The Project Applicant/Developer shall retain a Traffic Engineer or Civil Engineer licensed in the State of California to perform the traffic study to the satisfaction of the County.
5.10	**Traffic, Access and Circulation**	**MM 10-3** The Project Applicant/Developer shall seek to enter into a ~~Centennial Transportation Improvement Program (CTIP)~~ Traffic Mitigation Agreement for Land Development Impacts to California State Transportation Facilities with Caltrans and shall comply with the terms the ~~CTIP agreement~~ Traffic Mitigation Agreement if approved and implemented. Compliance with the ~~CTIP~~ Traffic Mitigation Agreement shall constitute compliance with the mitigation measures for the Project's traffic impacts on the State highway system. Any required improvements that result from direct Project impacts (i.e., not from cumulative impacts), and are required on Caltrans-owned facilities, shall be implemented

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#	Environmental Factor	Mitigation
		through a ~~CTIP~~ Traffic Mitigation Agreement. Any required improvements that result from cumulative traffic impacts may be implemented through payment of fair share fees.
5.10	**Traffic, Access and Circulation**	***The following further edit was identified subsequent to publication of the Final EIR in May 2018 and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors.*** **MM 10-3** The Project Applicant/Developer shall seek to enter into a Traffic Mitigation Agreement for Land Development Impacts to California State Transportation Facilities ~~with~~ by and between the Project Applicant/Developer and Caltrans, and during the term of such agreement shall comply with the terms ~~the Traffic Mitigation Agreement if approved and implemented~~ and conditions thereof. Compliance with the Traffic Mitigation Agreement shall constitute compliance with the mitigation measures for the Project's traffic impacts on the State highway system. Any required improvements that result from direct Project impacts (i.e., not from cumulative impacts), and are required on Caltrans-owned facilities, shall be implemented through a Traffic Mitigation Agreement. Any required improvements that result from cumulative traffic impacts may be implemented through payment of fair share fees.
5.10	**Traffic, Access and Circulation**	**MM 10-4** The Project Applicant/Developer will work with the County and/or Caltrans to establish a Traffic Mitigation Fee Program or an assessment district (an example of such is the Bridge and Thoroughfare District pursuant to *California Government Code*, Sections 66484 et seq.) or other equivalent program. Such a program or assessment district will mitigate vehicular trips related to new development accessing the SR-138 corridor between I-5 and SR-14 by establishing a fair share contribution from such new development to ensure the SR-138 needed improvements are fully funded. These fees shall be used for the needed improvements and may include the cost of engineering, soils analysis, right-of-way acquisition, demolition, relocation, construction, inspection, and other related expenses.
5.10	**Traffic, Access and Circulation**	**MM 10-5** The Project Applicant/Developer shall submit Traffic Management Plans to the County for review and approval. The Traffic Management Plans shall describe traffic-control measures that shall be implemented to maintain traffic flow in all directions, including where utilities and other improvements are being implemented in existing roadways. The Traffic Management Plans shall identify the following: construction haul routes; duration and location of lane closures; location of parking for the public and construction workers during construction phases; use of flag persons; and any pedestrian-related impacts to sidewalks and intersection crossings. The Traffic Management Plan shall be implemented during all stages of Project construction that generate traffic impacts.
5.10	**Traffic, Access and Circulation**	**MM 10-6** *(Supplemental Traffic Study MM-1)* To mitigate the Project's impacts to SR-138, the Project Applicant/Developer shall comply with the terms of the ~~CTIP~~ Traffic Mitigation Agreement to improve SR-138 to a four lane expressway from I-5 to 240th Street West and to a limited access four lane conventional highway from 240th Street West to 190th Street West, with right-of-way reserved for a six-lane expressway between ~~I-5~~ Gorman Post Road and 300th Street West, or comparable improvements consistent with the Northwest 138 Corridor Improvement Project ~~(specific improvements pending Caltrans selection of a~~ preferred alternative~~)~~.

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#	Environmental Factor	Mitigation
5.10	**Traffic, Access and Circulation**	**MM 10-7** *(Supplemental Traffic Study MM-2)* To mitigate the Project's impacts to SR-138, the Project Applicant/Developer shall comply with the terms of the ~~CTIP~~ Traffic Mitigation Agreement for the following intersection improvements at Specific Plan Westerly Access and SR-138: • Widen SR-138 to a ~~four~~ six-lane ~~highway~~ expressway from westerly project entrance to 300th ~~290th~~ Street West, ~~with auxiliary lanes between intersections,~~ resulting in three through lanes in the WB and EB directions. • Construct intersection to include: two NB left-turn lanes, three NB through lanes and one NB right-turn lane. • In the SB direction, construct two left turn lanes, three through lanes and ~~one free-flow~~ two right-turn lanes. • In the EB direction, construct three left-turn lanes and one right-turn lane. • In the WB direction, construct two left-turn lanes and ~~a free-flow~~ two right-turn lanes. • Install traffic signal. Or, contribute fair share to intersection improvements being advanced by Caltrans in the Northwest 138 Corridor Improvement Project ~~(specific improvements pending Caltrans selection of a~~ preferred alternative~~)~~.
5.10	**Traffic, Access and Circulation**	**MM 10-8** *(Supplemental Traffic Study MM-3)* To mitigate the Project's impacts to SR-138, the Project Applicant/Developer shall comply with the terms of the ~~CTIP~~ Traffic Mitigation Agreement for implementation of the following intersection improvements at Specific Plan Central Access and SR-138: • Widen SR-138 to a ~~four~~ six-lane ~~highway~~ expressway from westerly project entrance to 300th ~~290th~~ Street West, ~~with auxiliary lanes between intersections,~~ resulting in three through lanes in the WB and EB directions. • In the NB and SB directions, construct two left-turn lanes, three through lanes and one right-turn lane. • In the EB direction, construct two left-turn lanes and one right-turn lane. • In the WB direction, construct two left-turn lanes and ~~a free-flow~~ two right-turn lanes. • Install traffic signal and include SB and NB right-turn overlap phasing. Or, contribute fair share to intersection improvements being advanced by Caltrans in the Northwest 138 Corridor Improvement Project ~~(specific improvements pending Caltrans selection of a~~ preferred alternative~~)~~.

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#	Environmental Factor	Mitigation
5.10	**Traffic, Access and Circulation**	**MM 10-9** *(Supplemental Traffic Study MM-4)* To mitigate the Project's impacts to SR-138, the Project Applicant/Developer shall comply with the terms of the ~~CTIP~~ Traffic Mitigation Agreement for implementation of the following intersection improvements at 300th Street West and SR-138: • Widen SR-138 to a ~~four~~ six-lane ~~highway~~ expressway from westerly project entrance to 300th ~~290th~~ Street West, ~~with auxiliary lanes between intersections,~~ resulting in three through lanes in the WB and EB directions • Construct two left-turn lanes and one right-turn lane in the EB direction and two left-turn lanes and dual right-turn lanes in the WB direction. • In the NB direction, construct two left-turn lanes, three through lanes, and one right-turn lane. • In the SB direction, construct two left turn lanes, three through lanes and one ~~free-flow~~ right-turn lane. • Install traffic signal and include WB right-turn overlap phasing. Or, contribute fair share to intersection improvements being advanced by Caltrans in the Northwest 138 Corridor Improvement Project ~~(specific improvements pending Caltrans selection of a~~ preferred alternative~~)~~.
~~**5.10**~~	~~**Traffic, Access and Circulation**~~	~~**MM 10-10** *(Traffic Study MM-5)* To mitigate the Project's impacts to SR-138, the Project Applicant/Developer shall comply with the terms of the CTIP for implementation of the following intersection improvements at 290th Street West and SR-138:~~ ~~• Widen SR-138 to a four-lane highway from westerly project entrance to 290th Street West, with auxiliary lanes between intersections, resulting in three through lanes in the WB and EB directions.~~ ~~• Additional intersection improvements include: two EB left-turn lanes, one WB right-turn lane, two SB left-turn and two SB right-turn lanes.~~ ~~• Install traffic signal.~~ ~~Or, contribute fair share to intersection improvements being advanced by Caltrans in the Northwest 138 Corridor Improvement Project (specific improvements pending Caltrans selection of a preferred alternative).~~

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#	Environmental Factor	Mitigation
~~**5.10**~~	~~**Traffic, Access and Circulation**~~	**MM 10-10~~11~~** *(Supplemental Traffic Study MM-6)* To mitigate the Project's impacts to SR-138, the Project Applicant/Developer shall comply with the terms of the ~~CTIP~~ Traffic Mitigation Agreement for implementation of the following intersection improvements at Margalo Drive and SR-138: • Widen SR-138 to a four-lane ~~highway~~ expressway from 300th ~~290th~~ Street West to 240th ~~190th~~ Street West ~~with roadway augmentation at intersection, approximately ¼ mile in length for the west and east legs resulting in three through lanes in the WB and EB directions~~. • Additional intersection improvements include: ~~one~~ two EB left turn lanes~~,~~ ~~and~~ one WB right-turn lane, one SB left-turn lane, and two SB right-turn lanes. • Install traffic signal. Or, contribute fair share to intersection improvements being advanced by Caltrans in the Northwest 138 Corridor Improvement Project ~~(specific improvements pending Caltrans selection of a~~ preferred alternative~~)~~.
5.10	**Traffic, Access and Circulation**	**MM 10-11~~12~~** *(Supplemental Traffic Study MM-7)* To mitigate the Project's impacts to SR-138, the Project Applicant/Developer shall comply with the terms of the ~~CTIP~~ Traffic Mitigation Agreement for implementation of the following intersection improvements at Three Points and SR-138: • Widen SR-138 to a four-lane ~~highway~~ expressway from 300th ~~290th~~ Street West to 240th ~~190th~~ Street West ~~with roadway augmentation at intersection, approximately ¼ mile in length for the west and east legs~~ resulting in ~~three~~ two through lanes in the WB and EB directions. • Additional improvements include adding one NB left-turn lane, ~~and~~ one SB left turn lane and one SB right turn lane. Or contribute fair share to intersection improvements being advanced by Caltrans in the Northwest 138 Corridor Improvement Project ~~(specific improvements pending Caltrans selection of a~~ preferred alternative~~)~~.
5.10	**Traffic, Access and Circulation**	**MM 10-12~~13~~** *(Supplemental Traffic Study MM-8)* To mitigate the Project's impacts to SR-138, the Project Applicant/Developer shall comply with the terms of the ~~CTIP~~ Traffic Mitigation Agreement for implementation of the following intersection improvements at 250~~245~~th Street West and SR-138: • Widen SR-138 to a four-lane expressway ~~highway~~ from 300th ~~290th~~ Street West to 240th ~~190th~~ Street West ~~with roadway augmentation at intersection, approximately ¼ mile in length for the west and east legs~~ resulting in ~~three~~ two through lanes in the WB and EB directions. • Additional improvements include adding one ~~NB left-turn lane and one~~ SB left turn lane, one EB left-turn lane, one WB U-turn lane and one dedicated ~~EB~~ WB right-turn lane. • Install traffic signal. Or, contribute fair share to intersection improvements being advanced by Caltrans in the Northwest 138 Corridor Improvement Project ~~(specific improvements pending Caltrans selection of a~~ preferred alternative~~)~~.

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#	Environmental Factor	Mitigation
5.10	**Traffic, Access and Circulation**	**MM 10-13~~14~~** *(Supplemental Traffic Study MM-9)* To mitigate the Project's impacts to SR-138, the Project Applicant/Developer shall comply with the terms of the ~~CTIP~~ Traffic Mitigation Agreement for implementation of the following intersection improvements at 210th ~~230th~~ Street West and SR-138: • Widen SR-138 to a four-lane limited access conventional highway from 240th ~~290th~~ Street West to 190th Street West. • Additional improvements include one SB left-turn lane, one ~~SB~~ NB ~~right~~ left-turn lane, ~~and~~ one EB left-turn lane, one EB right-turn lane, and one WB left-turn lane. Or, contribute fair share to intersection improvements being advanced by Caltrans in the Northwest 138 Corridor Improvement Project ~~(specific improvements pending Caltrans selection of a~~ preferred alternative~~)~~.
~~**5.10**~~	~~**Traffic, Access and Circulation**~~	~~**MM 10-15** *(Traffic Study MM-10)* To mitigate the Project's impacts to SR-138, the Project Applicant/Developer shall comply with the terms of the CTIP for implementation of the following intersection improvements at 190th Street West and SR-138:~~ ~~• Widen SR-138 to a four-lane highway from 290th Street West to 190th Street West with roadway augmentation at intersection, approximately ¼ mile in length for the west and east legs resulting in three through lanes in the WB and EB directions.~~ ~~• Additional improvements include adding one EB left-turn lane, one WB left-turn lane, one NB left-turn lane and one SB left-turn lane and one dedicated EB right-turn lane.~~ ~~• Install traffic signal.~~ ~~Or, contribute fair share to intersection improvements being advanced by Caltrans in the Northwest 138 Corridor Improvement Project (specific improvements pending Caltrans selection of a preferred alternative).~~
5.10	**Traffic, Access and Circulation**	**MM 10-14~~16~~** *(Supplemental Traffic Study MM-11)* To mitigate the Project's impacts to SR-138, the Project Applicant/Developer shall comply with the terms of the ~~CTIP~~ Traffic Mitigation Agreement for implementation of the following intersection improvements at 170th Street West and SR-138: • Roadway augmentation at intersection, approximately ¼ mile in length for the east and west legs, resulting in 2 through lanes in the WB and EB directions at the intersection. • Additional improvements include one EB left-turn lane, one WB left-turn lane, one NB left-turn lane and one SB left-turn lane. Or, contribute fair share to intersection improvements being advanced by Caltrans in the Northwest 138 Corridor Improvement Project ~~(specific improvements pending Caltrans selection of a~~ preferred alternative~~)~~.

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#	Environmental Factor	Mitigation
~~**5.10**~~	~~**Traffic, Access and Circulation**~~	~~**MM 10-17** *(Traffic Study MM-12)* To mitigate the Project's impacts to SR-138, the Project Applicant/Developer shall comply with the terms of the CTIP for implementation of the following intersection improvements at 110th Street West and SR-138:~~ ~~• Roadway augmentation at intersection, approximately ¼ mile in length for the east and west legs, resulting in 2 through lanes in the WB and EB directions at the intersection.~~ ~~• Additional improvements include: one EB left-turn lane, one WB left-turn lane, two NB left-turn lanes, one SB left-turn lane and two SB right-turn lanes.~~ ~~• Install traffic signal.~~ ~~Or, contribute fair share to intersection improvements being advanced by Caltrans in the Northwest 138 Corridor Improvement Project (specific improvements pending Caltrans selection of a preferred alternative).~~
5.10	**Traffic, Access and Circulation**	**MM 10-15~~18~~** *(Supplemental Traffic Study MM-13)* To mitigate the Project's impacts to SR-138, the Project Applicant/Developer shall comply with the terms of the ~~CTIP~~ Traffic Mitigation Agreement for implementation of the following intersection improvements at 90th Street West and SR-138: • Roadway augmentation at intersection, approximately ¼ mile in length for the east and west legs, resulting in 2 through lanes in the WB and EB directions at the intersection. • Additional improvements include: ~~one~~ two EB left-turn lanes, one EB right-turn lane, one WB left-turn lane, one WB right-turn lane, one NB left-turn lane and one SB left-turn lane. Or, contribute fair share to intersection improvements being advanced by Caltrans in the Northwest 138 Corridor Improvement Project ~~(specific improvements pending Caltrans selection of a~~ preferred alternative~~)~~.
5.10	**Traffic, Access and Circulation**	**MM 10-16~~19~~** *(Supplemental Traffic Study MM-14)* To mitigate the Project's impacts to SR-138, the Project Applicant/Developer shall comply with the terms of the ~~CTIP~~ Traffic Mitigation Agreement for implementation of the following intersection improvements at 60th Street West and SR-138: • Roadway augmentation at intersection, approximately ¼ mile in length for the east and west legs, resulting in 2 through lanes in the WB and EB directions at the intersection. • Additional improvements include: one EB left-turn lane, one EB right-turn lane, one WB left-turn lane, one WB right-turn lane, one NB left-turn lane and one SB left-turn lane. • Install traffic signal. Or, contribute fair share to intersection improvements being advanced by Caltrans in the Northwest 138 Corridor Improvement Project ~~(specific improvements pending Caltrans selection of a~~ preferred alternative~~)~~.

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#	Environmental Factor	Mitigation
5.10	**Traffic, Access and Circulation**	**MM 10-17~~20~~** *(Supplemental Traffic Study MM-15)* To mitigate the Project's impacts to SR-138, the Project Applicant/Developer shall comply with the terms of the ~~CTIP~~ Traffic Mitigation Agreement for implementation of the following intersection improvements at ~~30th Street West~~ the SR-14 and SR-138 interchange: • ~~Roadway augmentation at intersection, approximately ¼ mile in length for the east and west legs, resulting in 2 through lanes in the WB and EB directions at the intersection.~~ • ~~Additional improvements include adding one EB left-turn lane and one WB left-turn lane.~~ • Install traffic signals at the NB off-ramp and the SB off-ramp. Or, contribute fair share to intersection improvements being advanced by Caltrans in the Northwest 138 Corridor Improvement Project ~~(specific improvements pending Caltrans selection of a~~ preferred alternative~~)~~.
5.10	**Traffic, Access and Circulation**	**MM 10-18~~21~~** *(Traffic Study MM-16)* To provide adequate capacity at the I-5/SR-138 interchange, the Project Applicant/Developer shall either (1) comply with the terms of the ~~CTIP~~ Traffic Mitigation Agreement or (2) contribute fair share funding toward the following ramp improvement at I-5/SR-138: • Addition of one auxiliary lane at the connector ramp from westbound SR-138 to southbound I-5 for existing plus Project conditions.
5.10	**Traffic, Access and Circulation**	**MM 10-19~~22~~** *(Traffic Study MM-17 and MM-34)* To provide adequate capacity at The Old Road at I-5 SB Ramps/Sedona intersection, the Project Applicant/Developer shall either (1) comply with the terms of the ~~CTIP~~ Traffic Mitigation Agreement or (2) contribute fair share funding toward the addition of a second southbound left-turn lane from The Old Road to the I-5 Southbound On-Ramp.
5.10	**Traffic, Access and Circulation**	**MM 10-20~~23~~** *(Supplemental Traffic Study MM-18)* To mitigate the increase of side-street delay for the existing adjacent off-site areas and for planned on-site side streets along SR-138, the Project Applicant/Developer shall either (1) comply with the terms of the ~~Centennial Transportation Improvement Program (CTIP)~~ Traffic Mitigation Agreement or (2) dedicate right-of-way within the project site at each site access location to accommodate the ultimate intersection or interchange configuration to be determined by the Northwest Corridor Improvement Project ~~(specific improvements pending Caltrans selection of a~~ preferred alternative~~)~~ at the following SR-138 intersections: • Westerly Access • Central Access • 300th Street West • ~~290th Street West~~

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#	Environmental Factor	Mitigation
5.10	**Traffic, Access and Circulation**	**MM 10-21** *(Supplemental Traffic Study MM-22)* To provide adequate on- and off-site capacity to accommodate up to 10 percent of the Project and anticipated cumulative development, the Project Applicant/Developer shall comply with the terms of the Traffic Mitigation Agreement for the following SR-138 intersection improvements for site access: • Westerly Access: Provide one EB left-turn lane, one EB through lane, one EB right-turn lane, one WB left-turn lane, one WB through lane, one WB right-turn lane, one NB left-turn lane, one shared NB through/right lane, one SB left-turn lane, and one shared SB through/right lane. Install traffic signal. • Central Access: Provide one EB left-turn lane, one EB through lane, one EB right-turn lane, one WB left-turn lane, one WB through lane, one WB right-turn lane, one NB left-turn lane, one NB through lane, one NB right-turn lane, one SB left-turn lane, one SB through lane, and one SB right-turn lane. Install traffic signal. • 300th Street West: Provide one EB left-turn lane, one EB through lane, one EB right-turn lane, one WB left-turn lane, one WB through lane, one WB right-turn lane, one NB left-turn lane, one shared NB through/right lane, one SB left-turn lane, and one shared SB through/right lane. Install traffic signal. • 190th Street West: Provide one EB left-turn lane, one EB through lane, one WB through lane, one WB right-turn lane, one SB left-turn lane, and one SB right lane.
5.10	**Traffic, Access and Circulation**	**MM 10-22~~24~~** *(Supplemental Traffic Study MM-19)* To provide adequate on- and off-site capacity to accommodate up to 75 percent of the Project and anticipated cumulative development, the Project Applicant/Developer shall either (1) comply with the terms of the ~~CTIP~~ Traffic Mitigation Agreement or (2) contribute fair share funding toward the widening of SR-138, including: • Addition of ~~an auxiliary~~ one additional lane in each direction (six lane~~s total~~ freeway) from I-5 to Gorman Post Road • Addition of two additional lanes in each direction (six lane expressway) from Gorman Post Road to 300th Street West • Addition of one additional lane in each direction (four lane expressway) from 300th Street West to 240th Street West • Addition of one additional lane in each direction (four lane limited access conventional highway) from 240th Street West to the SR-14 interchange
5.10	**Traffic, Access and Circulation**	**MM 10-23~~25~~** *(Supplemental Traffic Study MM-20)* To provide adequate on- and off-site capacity to accommodate 100 percent of the Project and anticipated cumulative development, the Project Applicant/Developer shall either (1) comply with the terms of the ~~CTIP~~ Traffic Mitigation Agreement or (2) contribute fair share funding toward the widening of SR-138, including: • Addition of ~~an auxiliary~~ a second additional lane in each direction (six lanes total) from 300th Street West to approximately ½ mile east of 250th ~~245th~~ Street West

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#	Environmental Factor	Mitigation
		• Construct additional intersection turn lanes at the following SR-138 intersections: ○ Westerly Project Access ○ 300th Street West ○ Margalo Drive ○ Three Points Road ○ 60th Street West
5.10	**Traffic, Access and Circulation**	**MM 10-2426** *(Traffic Study MM-21 and MM-26)* To provide adequate capacity to the I-5 mainline freeway, the Project Applicant/Developer shall either (1) comply with the terms of the ~~CTIP~~ Traffic Mitigation Agreement or (2) contribute fair share funding towards RTP/SCS improvement projects on SR-58 between I-5 in Kern County and I-15 in San Bernardino County, as verified by the County in consultation with the Kern COG and Caltrans. Improvements could include development of a high capacity goods movement facility along the SR-58 and/or E-220 corridors.
~~**5.10**~~	~~**Traffic, Access and Circulation**~~	~~**MM 10-27** *(Traffic Study MM-22)* To provide adequate capacity on SR-138, the Project Applicant/Developer shall comply with the terms of the CTIP for the SR-138 improvements to a limited access facility with grade-separated interchanges, consistent with the County's analysis of the AVAP, or fair share participation and/or contribution to the SR-138 improvements (freeway/expressway or expressway/limited access conventional highway) being advanced by Caltrans in the Northwest 138 Corridor Improvement Project (specific improvements pending Caltrans selection of a preferred alternative).~~
~~**5.10**~~	~~**Traffic, Access and Circulation**~~	~~**MM 10-28** *(Traffic Study MM-23)* To provide adequate capacity to the I-5 mainline freeway, the Project Applicant/Developer shall either (1) comply with the terms of the CTIP or (2) contribute fair share funding towards the following planned improvements to I-5:~~ ~~• I-5 between Fort Tejon and Grapevine Road and between SR-138 and Lake Hughes Road interchanges: Strengthening and widening the inside and outside shoulders of I-5.~~
5.10	**Traffic, Access and Circulation**	**MM 10-2529** *(Traffic Study MM-24)* The Project Applicant/Developer shall implement the Mobility Plan, included as Section 3.2 of the Specific Plan, which provides an extensive system of sidewalks, greenway trails, community trails, a dedicated transit easement, and two transit hubs to serve as alternative means of transportation on the Project site. The Mobility Plan also requires creation and ongoing operation of a Transportation Management Association (TMA) to implement ongoing transportation improvements and programs. The Project Applicant/Developer, through the required implementation of the Mobility Plan, shall: • Reinforce and serve the Land Use Plan; • Provide future residents, visitors and employees with multiple modes of transit/non-single occupancy vehicle (non-SOV) accessibility for internal and external trips ~~by future residents and visitors~~;

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#	Environmental Factor	Mitigation
		• Provide options to reduce vehicle trips and emissions by linking effective travel demand management with transportation systems and parking policies; • Provide residents and employees on the Project site with multiple modes of transportation options (i.e., walk, bike, public transit, private auto, car share, bike share, etc.); • Provide for 80 percent on average, but no less than 50 percent of each Village's residential units to be located within one-half mile of a Village Ceenter that includes retail and service uses; • Provide parks within a 5-minute walk (0.25 mile) of 80 percent of all residential units; • Provide a transit route easement no less than 25 feet wide in the Centennial Commerce District connecting the Town Center, Business Park, and Industrial/Civic areas and also northerly connecting to the Village Five Core; • Require TMA implementation of a combination of transit and transportation measures to ~~reduce~~ ensure that a minimum of 30 percent of total daily internal on-site trips are completed by using transit modes other than ~~single-occupancy automobile~~ SOV use ~~by 30 percent in relation to standard ITE generation rates for the overall Project~~; ~~and~~ • Require TMA implementation of a combination of transit and transportation measures to ~~reduce~~ ensure that a minimum of 20 percent of total off-site peak hour commutes to and from the Project site are completed by using transit modes other than SOVs ~~single-occupancy automobiles by 20 percent~~.; • Require TMA implementation of a program to coordinate with automotive dealers on the Project site to promote CNG, electric, and hybrid electric vehicles~~.~~; • Require TMA oversight of requirement for service fleet vehicles for agencies or businesses located on-site to be alternative fuel vehicles to the maximum extent feasible, as determine by the Project Applicant/Developer~~.~~; and • Require TMA implementation of a combination of measures to provide adequate temporary bike parking during large public events conducted at civic center, large amphitheaters, fairgrounds or athletic stadium uses that may be permitted, temporarily permitted, or conditionally permitted on the Project site pursuant to the Specific Plan. Such measures may include, but are not limited to, providing valet bike parking, temporarily anchored bike parking racks, or a secured temporary bike parking enclosure. The Circulation Plan sets forth requirements for roadway classifications; intersection controls; and traffic calming measures. Where approved by the California Department of Transportation (Caltrans) and the County and where maintenance and durability costs are comparable to traditional materials, use "cool" pavement materials, which reduce heat island effect.

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#	Environmental Factor	Mitigation
5.10	**Traffic, Access and Circulation**	***The following further edit was identified subsequent to publication of the Final EIR in May 2018 and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors.*** **MM 10-25** *(Traffic Study MM-24)* The Project Applicant/Developer shall implement the Mobility Plan, included as Section 3.2 of the Specific Plan, which provides an extensive system of sidewalks, greenway trails, community trails, a dedicated transit easement, and two transit hubs to serve as alternative means of transportation on the Project site. The Mobility Plan also requires creation and ongoing operation of a Transportation Management Association (TMA) to implement ongoing transportation improvements and programs. The Project Applicant/Developer, through the required implementation of the Mobility Plan, shall: • Reinforce and serve the Land Use Plan; • Provide future residents, visitors and employees with multiple modes of transit/non-single occupancy vehicle (non-SOV) accessibility for internal and external trips; • Provide options to reduce vehicle trips and emissions by linking effective travel demand management with transportation systems and parking policies; • Provide residents and employees on the Project site with multiple modes of transportation options (i.e., walk, bike, public transit, private auto, car share, bike share, etc.); • Provide for 80 percent on average, but no less than 50 percent of each Village's residential units to be located within one-half mile of a Village Center that includes retail and service uses; • Provide parks within a 5-minute walk (0.25 mile) of 80 percent of all residential units; • Provide a transit route easement no less than 25 feet wide in the Centennial Commerce District connecting the Town Center, Business Park, and Industrial/Civic areas and also northerly connecting to the Village Five Core; • Require TMA implementation of a combination of transit and transportation measures to ensure that a minimum of 30 percent of total daily internal on-site trips are completed by using transit modes other than SOV use, including on-demand pooled car or multi-passenger vehicle service; • Require TMA implementation of a combination of transit and transportation measures to ensure that a minimum of 20 percent of total off-site peak hour commutes to and from the Project site are completed by using transit modes other than SOVs, which shall include requiring the TMA to provide am and pm peak hour demand-based multi-passenger transit services for Project residents and employees that link the Project to the nearest Metrolink station and commuter transit hub to the south (currently Santa Clarita) and the east (currently Palmdale), and to the north (Tejon Mountain Village, Tejon Commerce Center, and Grapevine), and to other commuter destinations as warranted by consumer demand;

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#	Environmental Factor	Mitigation
		• Require TMA implementation of a program to coordinate with automotive dealers on the Project site to promote battery electric, or hydrogen fuel cell (collectively "electric") vehicles; at minimum, this program shall include preferences for dealers offering bulk discounts or other financial incentives; • Require TMA oversight of requirement for service fleet vehicles for agencies or businesses located on-site to be electric vehicles to the maximum extent feasible, as determine by the Project Applicant/Developer in consultation with the County, or other future vehicle technologies as may be developed and comply with California's air quality, greenhouse gas, and climate change mandates, and which meet the performance and affordability needs of Project employees and residents as determined by the Project Applicant/Developer in consultation with the County (collectively, "Future Vehicle Fleet" or "FVF"); and • Require TMA implementation of a combination of measures to provide adequate temporary bike or personal electric vehicle (e.g., scooter) parking during large public events conducted at civic center, large amphitheaters, fairgrounds or athletic stadium uses that may be permitted, temporarily permitted, or conditionally permitted on the Project site pursuant to the Specific Plan. Such measures may include, but are not limited to, providing valet bike parking, temporarily anchored bike parking racks, or a secured temporary bike parking enclosure. The Circulation Plan sets forth requirements for roadway classifications; intersection controls; and traffic calming measures. Where approved by the California Department of Transportation (Caltrans) and the County and where maintenance and durability costs are comparable to traditional materials, use "cool" pavement materials, which reduce heat island effect.
5.10	**Traffic, Access and Circulation**	**MM 10-26~~30~~** *(Traffic Study MM-24)* Each component of the Mobility Plan incorporates Transportation Demand Management (TDM) features to reduce dependence on the automobile, provide for a more efficient use of transportation resources among Project occupants, and thereby reduce pollutant emissions. Related to this is the creation and ongoing operation of a Transportation Management Association (TMA) to fund and manage the operation of ongoing transportation programs, including but not limited to transit and on-demand services. The key TDM elements that are inherent in the overall Mobility Plan are: • Sidewalks, greenway trails, and community trails that link residential, schools, shopping, and employment areas; • Small- to medium-sized streets and blocks that allow for shorter walking distances to retail, parks, schools, and other destinations; • Pedestrian environments incorporated with public streets; • Transit route easement connecting the residential and commerce areas; • Parking behind buildings to encourage walking in retail areas along street frontage; and • Parks within 0.25 mile of 80 percent of all residential units.

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#	Environmental Factor	Mitigation
5.10	**Traffic, Access and Circulation**	**MM 10-27~~31~~** *(Traffic Study MM-25)* To provide adequate capacity to the I-5 mainline freeway, the Project Applicant/Developer shall either (1) comply with the terms of the ~~CTIP~~ Traffic Mitigation Agreement or (2) contribute fair share funding towards the following planned improvements to I-5: • I-5 between Lake Hughes and Parker: Addition of one auxiliary lane in each direction. • I-5 between Parker Road and SR-14: Addition of one HOV or HOT lane in each direction.
5.10	**Traffic, Access and Circulation**	**MM 10-28~~32~~** *(Traffic Study MM-27)* To provide adequate capacity at the I-5/SR-138 interchange, the Project Applicant/Developer shall either (1) comply with the terms of the ~~CTIP~~ Traffic Mitigation Agreement or (2) contribute fair share funding toward the following ramp improvement at I-5/SR-138: • Addition of two auxiliary lanes at the connector ramp from westbound SR-138 to southbound I-5 for ~~Year 2035~~ cumulative buildout conditions.
5.10	**Traffic, Access and Circulation**	**MM 10-29~~33~~** *(Traffic Study MM-28)* To provide adequate capacity at the I-5/SR-138 interchange, the Project Applicant/Developer shall either (1) comply with the terms of the ~~CTIP~~ Traffic Mitigation Agreement or (2) contribute fair share funding toward the following ramp improvement at I-5/SR-138: • Addition of two auxiliary lanes at the connector ramp mainline before the northbound I-5 to eastbound SR-138 connector ramp
5.10	**Traffic, Access and Circulation**	**MM 10-30~~34~~** *(Traffic Study MM-29)* To provide adequate capacity at the SR-14/SR-138 interchange, the Project Applicant/Developer shall either (1) comply with the terms of the ~~CTIP~~ Traffic Mitigation Agreement or (2) contribute fair share funding toward the following ramp improvement at SR-14/SR-138: • Construction of one auxiliary lane and a second off-ramp lane for the SR-14 northbound off ramp to SR-138.
5.10	**Traffic, Access and Circulation**	**MM 10-31~~35~~** *(Traffic Study MM-30)* To provide adequate capacity at the SR-14/SR-138 interchange, the Project Applicant/Developer shall either (1) comply with the terms of the ~~CTIP~~ Traffic Mitigation Agreement or (2) contribute fair share funding toward the following ramp improvement at SR-14/SR-138: • Construction of a second lane on the SR-14 southbound on-ramp from SR-138.
5.10	**Traffic, Access and Circulation**	**MM 10-32~~36~~** *(Supplemental Traffic Study MM-31)* To provide adequate capacity at the SR-14 SB Ramps and SR-138 interchange, the Project Applicant/Developer shall (1) comply with the terms of the ~~CTIP~~ Traffic Mitigation Agreement for the reconfiguration of the interchange to include two eastbound through lanes and ~~three~~ two westbound through lanes~~. In the southbound direction, add a second right-turn lane;~~ and install a traffic signal ~~and include right-turn overlap phasing~~ or (2) contribute fair share funding for intersection improvements being advanced by Caltrans in the Northwest 138 Corridor Improvement Project ~~(specific improvements pending Caltrans selection of a~~ preferred alternative~~)~~.

TABLE 1-2
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#	Environmental Factor	Mitigation
5.10	**Traffic, Access and Circulation**	**MM 10-33~~37~~** *(Supplemental Traffic Study MM-32)* To provide adequate capacity at SR-14 NB Ramps and SR-138 interchange, the Project Applicant/Developer shall (1) comply with the terms of the ~~CTIP~~ Traffic Mitigation Agreement for the reconfiguration of the interchange to include two eastbound through lanes and two westbound through lanes ~~and, in the northbound direction, add two left-turn lanes~~ and a traffic signal or (2) contribute fair share funding for intersection improvements being advanced by Caltrans in the Northwest 138 Corridor Improvement Project ~~(specific improvements pending Caltrans selection of a~~ preferred alternative~~)~~.
5.10	**Traffic, Access and Circulation**	**MM 10-34~~38~~** *(Traffic Study MM-33)* To provide adequate capacity at Lake Hughes Road at I-NB Ramps intersection, the Project Applicant/Developer shall (1) comply with the terms of the ~~CTIP~~ Traffic Mitigation Agreement or (2) contribute fair share funding towards planned improvements to I-5 for the addition of one lane to the northbound off-ramp and restripe the configuration to include one left-turn, one shared left/right-turn lane, and one dedicated right-turn lane.
5.10	**Traffic, Access and Circulation**	**MM 10-35~~39~~** *(Traffic Study MM-35)* To provide adequate capacity at the Magic Mountain Parkway at I-5 SB Ramps intersection, the Project Applicant/Developer shall (1) comply with the terms of the ~~CTIP~~ Traffic Mitigation Agreement or (2) contribute fair share funding towards planned improvements to I-5 for the restriping of the southbound off-ramp to provide two left-turn lanes, one shared left-turn/through lane, and one right-turn lane.
5.10	**Traffic, Access and Circulation**	**MM 10-36~~40~~** *(Traffic Study MM-36)* To provide adequate capacity at the Magic Mountain Parkway at I-5 NB Ramps intersection, the Project Applicant/Developer shall (1) comply with the terms of the ~~CTIP~~ Traffic Mitigation Agreement or (2) contribute fair share funding towards planned improvements to I-5 for the conversion of the shared through/right-turn lane to a shared left/through/right-turn lane.
5.10	**Traffic, Access and Circulation**	**MM 10-37~~41~~** *(Traffic Study MM-37)* To provide adequate capacity at the Valencia Road at I-5 SB Ramps intersection, the Project Applicant/Developer shall either (1) comply with the terms of the ~~CTIP~~ Traffic Mitigation Agreement or (2) contribute fair share funding toward the striping of a third westbound through lane.
5.10	**Traffic, Access and Circulation**	**MM 10-38~~42~~** *(Traffic Study MM-38)* To provide adequate capacity at the Valencia Road at I-5 NB Ramps intersection, the Project Applicant/Developer shall either (1) comply with the terms of the ~~CTIP~~ Traffic Mitigation Agreement or (2) contribute fair share funding toward the traffic signal modification to add a northbound right-turn overlap phase.
5.10	**Traffic, Access and Circulation**	**MM 10-39~~43~~** *(Traffic Study MM-39)* To provide adequate capacity at the McBean Parkway at I-5 SB Ramps intersection, the Project Applicant/Developer shall either (1) comply with the terms of the ~~CTIP~~ Traffic Mitigation Agreement or (2) contribute fair share funding toward the restriping of the dedicated westbound right-turn lane to a shared through/right-turn lane.
5.10	**Traffic, Access and Circulation**	**MM 10-40~~44~~** *(Traffic Study MM-40)* To provide adequate capacity at the Calgrove Road at I-5 SB Ramps intersection, the Project Applicant/Developer shall either (1) comply with the terms of the ~~CTIP~~ Traffic Mitigation Agreement or (2) contribute fair share funding toward adding a second eastbound through lane and a de-facto right-turn lane and a second through lane in the westbound direction.

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CENTENNIAL SPECIFIC PLAN MITIGATION SUMMARY

#	Environmental Factor	Mitigation
5.10	**Traffic, Access and Circulation**	**MM 10-~~41~~45** *(Traffic Study MM-41)* To provide adequate capacity at the Calgrove Road at I-5 NB Ramps intersection, the Project Applicant/Developer shall either (1) comply with the terms of the ~~CTIP~~ Traffic Mitigation Agreement or (2) contribute fair share funding toward restriping to add a westbound de facto right-turn lane.
5.11	**Air Resources**	**MM 11-1** The Project's plans and specifications shall require stationary sources to comply with the parameters stated in Stationary Source Types, Size Limits, and Quantity Estimates, which is included as Attachment A to the Project's Mitigation Monitoring and Reporting Program. Should there be a need for a stationary source exceeding the prescribed limits, the Project Applicant/Developer shall apply for source-specific permit from the Antelope Valley Air Quality Management District (AVAQMD) or South Coast Air Quality Management District (SCAQMD), as applicable.
5.11	**Air Resources**	**MM 11-2** The Project's plans and specifications shall include the following measures to minimize nitrogen oxide (NOx) and volatile organic compound (VOC) emissions during construction: • All off-road diesel-powered construction equipment greater than 50 horsepower shall meet U.S. Environmental Protection Agency (USEPA) Tier 4 Final emission standards to the extent that the equipment is available. In addition, all construction equipment shall be outfitted with Best Available Control Technology (BACT) devices certified by the California Air Resources Board (CARB) or the U.S. Environmental Protection Agency (USEPA). Any emissions-control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations. If Tier 4 Final equipment is not available, the Project Applicant/Developer shall provide the County with documentation showing the reasons for non-availability. • Alternatively, construction equipment may be selected according to the Green Construction Policy used by the Los Angeles County Metropolitan Transportation Authority or the ports of Los Angeles/Long Beach. These policies include provisions to 'step down' from Tier 4 equipment to Tier 3 or Tier 2 if specified criteria are met. In addition, all construction equipment shall be outfitted with Best Available Control Technology (BACT) devices certified by the California Air Resources Board (CARB) or the U.S. Environmental Protection Agency (USEPA). • Require the use of 2010 and newer diesel haul trucks (e.g., material delivery trucks and soil import/export). If the Project Applicant/Developer determines that 2010 model year or newer diesel trucks cannot be obtained, trucks that meet USEPA 2007 model year NOx emissions requirements shall be required. If 2010 model year or newer diesel trucks are not available, the Project Applicant/Developer shall provide the County with documentation showing the reasons for non-availability. • A copy of each unit's certified tier specification, BACT documentation, and CARB or District operating permit shall be provided to the County at the first occurrence of mobilization of each applicable unit of equipment.

TABLE 1-2
CENTENNIAL SPECIFIC PLAN MITIGATION SUMMARY

#	Environmental Factor	Mitigation
		• Construction contractors shall ensure construction equipment is properly serviced and maintained to the manufacturer's standards. • Construction contractors shall limit non-essential idling of construction equipment to no more than five consecutive minutes. • Construction contractors shall use Super-Compliant Architectural/Industrial (AIM) Coatings to the extent that they are commercially available and certified to meet the applicable requirements of Antelope Valley Air Quality Management District Rule 1113 and South Coast Air Quality Management District Rule 1113.
5.11	**Air Resources**	**MM 11-3** The Project's plans and specifications shall prohibit wood-burning fireplaces as required by SCAQMD Rule 445 in single-family residences throughout the entire Project site, including at residences that are 3,000 or more feet above mean sea level at which the SCAQMD prohibition would otherwise not apply. Natural gas fireplaces shall be limited to a total of 13,954.
5.11	**Air Resources**	***The following edit was identified subsequent to publication of the Final EIR in May 2018 and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors.*** **MM 11-3** The Project's plans and specifications shall prohibit wood-burning fireplaces as required by SCAQMD Rule 445 in single-family residences throughout the entire Project site, including at residences that are 3,000 or more feet above mean sea level at which the SCAQMD prohibition would otherwise not apply. Natural gas fireplaces shall be limited to a total of 13,954. These requirements shall be posted on the community intranet and shall be clearly described and distributed to home buyers through their home purchase contracts and CC&Rs.
5.11	**Air Resources**	**MM 11-4** The Project's plans and specifications for non-residential buildings shall demonstrate that the following features have been incorporated into the building designs. Proof of compliance shall be provided to the County prior to the issuance of occupancy permits. • For buildings with over 10 tenant-occupants, changing/shower facilities shall be provided as specified in Section A5.106.4.3, Nonresidential Voluntary Measures, of the CALGreen Code as follows: for 11 to 50 tenant-occupants, one unisex shower and two 2-tier lockers; for 51 to 100 tenant-occupants, one unisex shower and three 2-tier lockers; for 101 to 200 tenant-occupants, one shower per gender and four 2-tier lockers; and for over 200 tenant-occupants, one shower per gender for each 200 additional tenant-occupants and one 2-tier locker for each 50 additional tenant-occupant. • Preferential parking for low-emitting, fuel-efficient, and carpool/van vehicles shall be provided as specified in Section A5.106.5.1, Nonresidential Voluntary Measures, of the CALGreen Code as follows: two for 10 to ~~15~~ 25 spaces; four for 26 to 50 spaces; six for 51 to 75 spaces; nine for 76 to 100 spaces; eleven for 101 to 150 spaces; 18 for 151 to 200 spaces; and at least 10 percent of total for 201 and more spaces. • ~~Facilities~~ Electric Vehicle Charging Spaces (EV Space), as defined by CALGreen Code Section 202, shall be installed to support future installation of ~~e~~Electric ~~v~~Vehicle Supply Equipment (EVSE), as defined by CALGreen

TABLE 1-2
CENTENNIAL SPECIFIC PLAN MITIGATION SUMMARY

<table>
<tr><th>#</th><th>Environmental Factor</th><th>Mitigation</th></tr>
<tr><td></td><td></td><td>
Code Section 202, ~~charging~~ at each non-residential building with ~~3~~ 10 or more parking spaces. Installation of each EV Space shall be consistent with Sections A5.106.5.3 and A5.106.5.3.1, Nonresidential Voluntary Measures (Tier 1), of the CALGreen Code. The EV Space facilities shall meet Section 406.9 (Electric Vehicle) of the *California Building Code* and as follows:
<table>
<tr><th>Total Number of Actual Parking Spaces</th><th>Tier 1 Number of Required EV Spaces</th></tr>
<tr><td>0-9</td><td>0</td></tr>
<tr><td>10-25</td><td>2</td></tr>
<tr><td>26-50</td><td>3</td></tr>
<tr><td>51-75</td><td>5</td></tr>
<tr><td>76-100</td><td>7</td></tr>
<tr><td>101-150</td><td>10</td></tr>
<tr><td>151-200</td><td>14</td></tr>
<tr><td>>200</td><td>8 percent of total spaces rounded up to nearest whole number</td></tr>
</table>
~~**Single charging space requirements.** When only a single charging space is required, install a listed raceway capable of accommodating a dedicated branch circuit. The raceway shall not be less than trade size 1. The raceway shall be securely fastened at the main service or subpanel and shall terminate in close proximity to the proposed location of the charging system into a listed cabinet, box or enclosure.~~

Multiple charging spaces required. When multiple EV Spaces are required, plans shall include the location(s) and type of ~~electrical vehicle supply equipment (~~EVSE~~),~~ raceway method(s), wiring schematics and electrical calculations to verify that the electrical system has sufficient capacity to charge simultaneously all the electric vehicles (EV) at all designated EV ~~charging s~~Spaces at their full rated amperage. Plan design shall be based on Level 2 EVSE at its maximum operating ampacity. Provide raceways from the electrical service panel to the designated parking areas which are required to be installed at the time of construction.
</td></tr>
</table>

TABLE 1-2
CENTENNIAL SPECIFIC PLAN MITIGATION SUMMARY

<table>
<tr><th>#</th><th>Environmental Factor</th><th>Mitigation</th></tr>
<tr><td>5.11</td><td>Air Resources</td><td>
The following further edit was identified subsequent to publication of the Final EIR in May 2018 and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors.

MM 11-4 The Project's plans and specifications for non-residential buildings shall demonstrate that the following features have been incorporated into the building designs. Proof of compliance shall be provided to the County prior to the issuance of occupancy permits.

• For buildings with over 10 tenant-occupants, changing/shower facilities shall be provided as specified in Section A5.106.4.3, Nonresidential Voluntary Measures, of the CALGreen Code as follows: for 11 to 50 tenant-occupants, one unisex shower and two 2-tier lockers; for 51 to 100 tenant-occupants, one unisex shower and three 2-tier lockers; for 101 to 200 tenant-occupants, one shower per gender and four 2-tier lockers; and for over 200 tenant-occupants, one shower per gender for each 200 additional tenant-occupants and one 2-tier locker for each 50 additional tenant-occupant.

• Preferential parking for <u>electric vehicles, other FVF vehicles,</u> <s>low-emitting, fuel-efficient,</s> and carpool/van vehicles shall be provided as specified in Section A5.106.5.1, Nonresidential Voluntary Measures, of the CALGreen Code as follows: two for 10 to 25 spaces; four for 26 to 50 spaces; six for 51 to 75 spaces; nine for 76 to 100 spaces; eleven for 101 to 150 spaces; 18 for 151 to 200 spaces; and at least 10 percent of total for 201 and more spaces.

• Electric Vehicle Charging Spaces (EV Space), as defined by CALGreen Code Section 202, shall be installed to support future installation of Electric Vehicle Supply Equipment (EVSE), as defined by CALGreen Code Section 202, at each non-residential building with 10 or more parking spaces. Installation of each EV Space shall be consistent with Sections A5.106.5.3 and A5.106.5.3.1, Nonresidential Voluntary Measures (Tier 1), of the CALGreen Code. The EV Space facilities shall meet Section 406.9 (Electric Vehicle) of the *California Building Code* and as follows:

<table>
<tr><th>Total Number of Actual Parking Spaces</th><th>Tier 1 Number of Required EV Spaces</th></tr>
<tr><td>0-9</td><td>0</td></tr>
<tr><td>10-25</td><td>2</td></tr>
<tr><td>26-50</td><td>3</td></tr>
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<tr><td>101-150</td><td>10</td></tr>
<tr><td>151-200</td><td>14</td></tr>
<tr><td>>200</td><td>8 percent of total spaces rounded up to nearest whole number</td></tr>
</table>
</td></tr>
</table>

TABLE 1-2
CENTENNIAL SPECIFIC PLAN MITIGATION SUMMARY

#	Environmental Factor	Mitigation
		Multiple charging spaces required. When multiple EV Spaces are required, plans shall include the location(s) and type of EVSE, raceway method(s), wiring schematics and electrical calculations to verify that the electrical system has sufficient capacity to charge simultaneously all the electric vehicles (EV) at all designated EV Spaces at their full rated amperage. Plan design shall be based on Level 2 EVSE at its maximum operating ampacity. Provide raceways from the electrical service panel to the designated parking areas which are required to be installed at the time of construction. **Increased EVSE Installations.** Changes to EVSE parking shall be allowed to the extent allowed under state laws, and the duration of vehicular occupancy of EV spaces may be restricted as authorized by state law to allow charging of multiple vehicles each day. Demand for EV Space facilities shall be monitored biennially by the TMA, additional EV parking spaces shall be made available at lots where demand exceeds supply. The TMA biennial survey shall also consider future transportation technology and practices, including for example changes in vehicular electric charging technology, other FVF changes, or other transportation practices and services changes (e.g., with lower-automobile ownership rates leading to reduced parking demand and/or reduced private ownership of vehicles requiring daily electric charging).
5.11	**Air Resources**	**MM 11-5** The Project's plans and specifications for residential buildings shall demonstrate that the following features have been incorporated. • Visitor parking shall include preferentially located parking spaces for alternative-fueled vehicles. • Exterior electrical receptacles and natural gas or propane hookups. • Bicycle parking shall be provided as specified in Section A4.106.9, Residential Voluntary Measures, of the CALGreen Code or as required by Section 22.52.1225B of the County Code, whichever is more stringent. The requirements under the Residential Voluntary Measures of the CALGreen Code are as follows: **Short-term bicycle parking.** Provide permanently anchored bicycle racks within 100 feet of the visitor's entrance, readily visible to passers-by, for five percent of visitor motorized vehicle parking capacity within a minimum of one two-bike capacity rack. **Long-term bicycle parking for multifamily buildings.** Provide on-site bicycle parking for at least one bicycle per every two dwelling units. Acceptable parking facilities shall be conveniently reached from the street and may include, but not limited to: 1. Covered, lockable enclosures with permanently anchored racks for bicycles. 2. Lockable bicycle rooms with permanently anchored racks. 3. Lockable, permanently anchored bicycle lockers. **Long-term bicycle parking for hotel and motel buildings.** Provide one on-site bicycle parking space for every 25,000 square feet, but not less than two. Acceptable parking facilities shall be conveniently reached from the street and may include, but not be limited to:

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#	Environmental Factor	Mitigation
		1. Covered, lockable enclosures with permanently anchored racks for bicycles. 2. Lockable bicycle rooms with permanently anchored racks. 3. Lockable, permanently anchored bicycle lockers.
5.11	**Air Resources**	***The following further edit was identified subsequent to publication of the Final EIR in May 2018 and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors.*** **MM 11-5** The Project's plans and specifications for residential buildings shall demonstrate that the following features have been incorporated. • Visitor parking shall include preferentially located parking spaces for <u>electric</u> ~~alternative-fueled~~ vehicles. • Exterior electrical receptacles and natural gas or propane hookups. • Bicycle parking shall be provided as specified in Section A4.106.9, Residential Voluntary Measures, of the CALGreen Code or as required by Section 22.52.1225B of the County Code, whichever is more stringent. The requirements under the Residential Voluntary Measures of the CALGreen Code are as follows: **Short-term bicycle parking.** Provide permanently anchored bicycle racks within 100 feet of the visitor's entrance, readily visible to passers-by, for five percent of visitor motorized vehicle parking capacity within a minimum of one two-bike capacity rack. **Long-term bicycle parking for multifamily buildings.** Provide on-site bicycle parking for at least one bicycle per every two dwelling units. Acceptable parking facilities shall be conveniently reached from the street and may include, but not limited to: 1. Covered, lockable enclosures with permanently anchored racks for bicycles. 2. Lockable bicycle rooms with permanently anchored racks. 3. Lockable, permanently anchored bicycle lockers. **Long-term bicycle parking for hotel and motel buildings.** Provide one on-site bicycle parking space for every 25,000 square feet, but not less than two. Acceptable parking facilities shall be conveniently reached from the street and may include, but not be limited to: 1. Covered, lockable enclosures with permanently anchored racks for bicycles. 2. Lockable bicycle rooms with permanently anchored racks. 3. Lockable, permanently anchored bicycle lockers. **<u>Bicycle parking areas may also be used by small electric vehicles such as scooters.</u>**

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#	Environmental Factor	Mitigation
5.11	**Air Resources**	**MM 11-6** The Project's plans and specifications for parking structures and parking lots with 20 or more parking spaces that serve uses other than residential or nonresidential buildings (e.g., trailhead, park), and parking structures and parking lots that serve multifamily residential buildings with 17 or more multifamily units, shall demonstrate that the following features have been incorporated into the parking facility. • The parking facility shall include a minimum of five percent preferentially located parking spaces for alternative-fueled (electric, natural gas, or similar low-emitting technology) vehicles. • Five percent of ~~T~~the total number of parking spaces provided in the parking facility, but in no case less than one, shall be Electric Vehicle Parking Spaces (EV Spaces), as defined in CALGreen Code Section 202, capable of supporting future Electric Vehicle Supply Equipment (EVSE), as defined in CALGreen Code Section 202 ~~include at least one electric vehicle charging station. Electrical lines shall be designed and sized to add additional charging stations when a demand is demonstrated~~. Calculations for the required number of EV Spaces shall be rounded up to the nearest whole number and ~~T~~the design and installation of each EV Space shall be consistent with Section A4.106.8.2, Residential Voluntary Measures, and Section 4.106.4.2, of the CALGreen Code as follows: **Single charging space requirements.** When only a single EV ~~charging s~~Space is required, install a listed raceway capable of accommodating a dedicated branch circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall be securely fastened at the main service or subpanel and shall terminate in close proximity to the proposed location of the charging system into a listed cabinet, box or enclosure. **Multiple charging spaces required.** When multiple EV ~~charging s~~Spaces are required, plans shall include the location(s) and type of ~~electrical vehicle supply equipment (~~EVSE~~)~~, raceway method(s), wiring schematics and electrical calculations to verify that the electrical system has sufficient capacity to charge simultaneously all the electric vehicles at all designated EV ~~charging s~~Spaces at their full rated amperage. Plan design shall be based on Level 2 EVSE at its maximum operating ampacity. Only underground raceways and related underground equipment are required to be installed at the time of construction. • For residential parking facilities, bicycle parking shall be provided as specified in Section A4.106.9, Residential Voluntary Measures, of the CALGreen Code, or as required by County Code Section 22.52.1225B, whichever is more stringent. • Bicycle parking spaces at a rate of 5 percent of minimum required vehicle parking spaces for nonresidential land uses or as required by Section 22.52.1225B of the County Code, whichever is more stringent.

TABLE 1-2
CENTENNIAL SPECIFIC PLAN MITIGATION SUMMARY

#	Environmental Factor	Mitigation
5.11	**Air Resources**	***The following further edit was identified subsequent to publication of the Final EIR in May 2018 and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors.*** **MM 11-6** The Project's plans and specifications for parking structures and parking lots with 20 or more parking spaces that serve uses other than residential or nonresidential buildings (e.g., trailhead, park), and parking structures and parking lots that serve multifamily residential buildings with 17 or more multifamily units, shall demonstrate that the following features have been incorporated into the parking facility. • The parking facility shall include a minimum of five percent preferentially located parking spaces for ~~alternative-fueled (~~electric~~, natural gas, or similar low-emitting technology)~~ vehicles. • Five percent of the total number of parking spaces provided in the parking facility, but in no case less than one, shall be Electric Vehicle Parking Spaces (EV Spaces), as defined in CALGreen Code Section 202, capable of supporting future Electric Vehicle Supply Equipment (EVSE), as defined in CALGreen Code Section 202. Calculations for the required number of EV Spaces shall be rounded up to the nearest whole number and the design and installation of each EV Space shall be consistent with Section A4.106.8.2, Residential Voluntary Measures, and Section 4.106.4.2, of the CALGreen Code as follows: **Single charging space requirements.** When only a single EV Space is required, install a listed raceway capable of accommodating a dedicated branch circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall be securely fastened at the main service or subpanel and shall terminate in close proximity to the proposed location of the charging system into a listed cabinet, box or enclosure. **Multiple charging spaces required.** When multiple EV Spaces are required, plans shall include the location(s) and type of EVSE, raceway method(s), wiring schematics and electrical calculations to verify that the electrical system has sufficient capacity to charge simultaneously all the electric vehicles at all designated EV Spaces at their full rated amperage. Plan design shall be based on Level 2 EVSE at its maximum operating ampacity. Only underground raceways and related underground equipment are required to be installed at the time of construction. • For residential parking facilities, bicycle parking shall be provided as specified in Section A4.106.9, Residential Voluntary Measures, of the CALGreen Code, or as required by County Code Section 22.52.1225B, whichever is more stringent. • Bicycle parking spaces at a rate of 5 percent of minimum required vehicle parking spaces for nonresidential land uses or as required by Section 22.52.1225B of the County Code, whichever is more stringent.

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CENTENNIAL SPECIFIC PLAN MITIGATION SUMMARY

#	Environmental Factor	Mitigation
5.11	**Air Resources**	**MM 11-7** The Project's plans and specifications for business park or water reclamation facility land uses shall demonstrate that buffer areas adjacent to proposed business parks in compliance with the Air Quality Analysis for Stationary Sources Allowed by the Centennial Specific Plan, (see Appendix 5.11-B of this EIR) have been incorporated into the design plans. The buffer areas shall prohibit uses that are potential sources of toxic air contaminants and shall prohibit uses that include sensitive receptors, except as allowed through written evidence that the sensitive use would not be exposed to Toxic Air Contaminants with pollutant concentrations resulting in a cancer risk greater than or equal to 10 in 1 million for health risks and 1.0 for non-cancer chronic and acute hazard indices (HIs).
5.11	**Air Resources**	**MM 11-8** Prior to approval of any tract map that includes an air quality sensitive use (e.g., residence, school, hospital, daycare center) within a designated business park, the Project Applicant/Developer shall provide written evidence to the County that the sensitive use would not be exposed to Toxic Air Contaminants with pollutant concentrations resulting in a cancer risk greater than or equal to 10 in 1 million for health risks and 1.0 for non-cancer chronic and acute hazard indices (HIs).
5.11	**Air Resources**	**MM 11-9** The Project's plans and specifications shall demonstrate that all distribution centers are within the business park areas south of State Route (SR) 138 and are located at least 1,000 feet from existing sensitive receptors and lands designated for sensitive land uses. Distribution centers shall not be allowed in other areas within the Project site.
5.11	**Air Resources**	**MM 11-10** The Project's plans and specifications shall demonstrate that any land uses involving the public congregation of sensitive receptors (e.g. residential, schools, hospital, daycare center) are not within 150 feet of the near edge of the SR-138 traffic lanes.
5.11	**Air Resources**	***The following edit was identified subsequent to publication of the Final EIR in May 2018 and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors.*** **MM 11-10** The Project's plans and specifications shall demonstrate that any land uses involving the public congregation of sensitive receptors (e.g. residential, schools, hospital, daycare center) are not within ~~150~~ 250 feet of the near edge of the SR-138 traffic lanes.
5.11	**Air Resources**	**MM 11-11** Prior to the approval of any tract map that includes an air quality sensitive receptor (e.g. residential, day care, schools, hospital) located within 500 feet of the SR-138 and/or any "high volume roadway" (i.e., a roadway with an average daily traffic volume that equals or exceeds 50,000 vehicles), the Project Applicant/Developer shall provide to the Air Pollution Control District(s) with jurisdiction over the mapped area a dispersion analysis prepared in accordance with each applicable Air District's methodological requirements to calculate the health risks from vehicle emissions from SR-138 and/or high volume roadway, as relevant. If the study concludes that ~~health risks would be significant at the location of a proposed sensitive receptor~~ any sensitive receptor exposure would equal or exceed 20 in 1 million for cancer risk or 1.0 for non-cancer indices (or future more stringent thresholds as may be adopted by the applicable Air District(s) and approved by the County for use on projects subject to the County's lead agency authority under the California Environmental Quality Act) (District TAC Thresholds), then the applicant shall submit a Toxic Air Contaminant (TAC) Emission Reduction Plan to the applicable Air District(s) for review and concurrence. Following

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#	Environmental Factor	Mitigation
		review and concurrence by the applicable Air District(s), a copy of the TAC Emission Reduction Plan, confirming that no sensitive receptors on the Project site will be exposed to TAC risks in excess of District TAC Thresholds, shall be provided to the Los Angeles County Department of Regional Planning, prior to County approval of the tentative tract map. In the TAC Emission Reduction Plan, TAC exposure reduction measures shall be implemented to assure that no sensitive receptors are exposed to TAC-related health impacts that equal or exceed District TAC Thresholds. TAC exposure reduction measures include, but are not limited to, setbacks, vegetative barriers, heating, ventilation and air conditioning (HVAC) system filtration technologies, etc., and shall be required as a condition of approval for the tentative tract map, and/or required as a condition prior to issuance of a building permit approval for future sensitive use(s) included in the tentative tract map. ~~effective design measures must be implemented into the structures to mitigate for interior air quality, such as ventilation systems that include MERV13 filters or equivalent protections against TACs from vehicle emissions. Confirmation of compliance shall be provided to the County prior to occupancy that include sensitive receptors within 500 feet of the SR-138.~~
5.11	**Air Resources**	***The following further edit was identified subsequent to publication of the Final EIR in May 2018 and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors.*** **MM 11-11** Prior to the approval of any tract map that includes an air quality sensitive receptor (e.g. residential, day care, schools, hospital) located more than 250 feet, but less than or equal to 500 feet, of the SR-138 and/or within 500 feet ~~of the SR-138 and/or~~ of any "high volume roadway" (i.e., a roadway with an average daily traffic volume that equals or exceeds 50,000 vehicles), the Project Applicant/Developer shall provide to the Air Pollution Control District(s) with jurisdiction over the mapped area a dispersion analysis prepared in accordance with each applicable Air District's methodological requirements to calculate the health risks from vehicle emissions from SR-138 and/or high volume roadway, as relevant. If the study concludes that any sensitive receptor exposure would equal or exceed 20 in 1 million for cancer risk or 1.0 for non-cancer indices (or future more stringent thresholds as may be adopted by the applicable Air District(s) and approved by the County for use on projects subject to the County's lead agency authority under the California Environmental Quality Act) (District TAC Thresholds), then the applicant shall submit a Toxic Air Contaminant (TAC) Emission Reduction Plan to the applicable Air District(s) for review and concurrence. Following review and concurrence by the applicable Air District(s), a copy of the TAC Emission Reduction Plan, confirming that no sensitive receptors on the Project site will be exposed to TAC risks in excess of District TAC Thresholds, shall be provided to the Los Angeles County Department of Regional Planning, prior to County approval of the tentative tract map. In the TAC Emission Reduction Plan, TAC exposure reduction measures shall be implemented to assure that no sensitive receptors are exposed to TAC-related health impacts that equal or exceed District TAC Thresholds. TAC exposure reduction measures include, but are not limited to, setbacks, vegetative barriers, heating, ventilation and air conditioning (HVAC) system filtration technologies, etc., and shall be required as a condition of approval for the tentative tract map, and/or required as a condition prior to issuance of a building permit approval for future sensitive use(s) included in the tentative tract map.

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#	Environmental Factor	Mitigation	
5.12	**Noise**	**MM 12-1**	For residences, hotels and motels, schools, and places of worship ~~adjacent to~~ within 500 feet from the centerline of a collector road with a buildout forecast of 10,000 average daily trips (ADT) or greater, a limited secondary road with a buildout forecast of 6,500 ADT or greater, or any higher classification road, the Project Applicant/Developer shall submit to the County an Acoustical Study prepared in accordance with Section 1207.12 of the County Building Code. The Acoustical Study shall demonstrate that exterior noise levels at areas where residents would reasonably be expected to spend more than one hour (e.g., backyards) would not exceed 65 A-weighted decibels (dBA) Community Noise Equivalent Level (CNEL). The Acoustical Study shall also verify, including during construction and before Certificate of Occupancy (CofO) issuance, that the buildings have been properly designed to comply with a CNEL requirement of 45 dBA for habitable interior living areas, classrooms, and rooms used for patient care and worship. The design features required to achieve the noise standard shall include one or more of the following elements, as verified by the Acoustical Study: building setbacks from the roadway; noise barriers; building orientation relative to the roadway; interior living space (bedroom, common area) orientation; sound-rated windows; upgraded exterior wall and/or roof construction; insulation batts; and forced air ventilation.
5.12	**Noise**	**MM 12-2**	For each business park use, school, community use area, park and recreation area, animal control facility, utility, County maintenance facility, commercial development, or manufacturing/industrial development, the Project Applicant/Developer shall submit an Acoustical Study verify that the Project has been properly designed to comply with the County of Los Angeles's Noise Ordinance standards at the nearby sensitive properties (both on and off site). The design features required to achieve the noise standard shall include one or more of the following elements, as verified by the Acoustical Study: building setbacks from the sensitive receptors; noise barriers; building orientation relative to the sensitive receptor; sound-rated windows; and upgraded exterior wall and/or roof construction. All stationary and point sources of noise shall adhere to the requirements of the County Code, including but not limited to Section 12.08.390, Exterior Noise Standards, Section 12.08.460, Loading and Unloading Operations, and Section 12.08.530, Residential Air-Conditioning or Refrigeration Equipment.
5.12	**Noise**	**MM 12-3**	To ensure that construction noise is minimized, in addition to meeting all requirements of Section 12.08 of the *County of Los Angeles Code,* the following measures shall be implemented during construction: • All construction equipment, including internal combustion engines and stationary equipment (used for construction purposes) shall be equipped with noise-reducing features such as, but not limited to improved mufflers, intake silencers, ducts, engine enclosures, and acoustical shields or shrouds. All equipment items must have the manufacturers' recommended noise abatement measures, such as mufflers, engine enclosures, and engine vibration isolators, intact and operational. • Stationary equipment (e.g., generators, air compressors, concrete pumps) located within 450 feet of residences or schools shall have noise abatement (e.g., engine enclosures or equipment placed behind barriers) to limit the noise level at the sensitive receptor to an average sound level (Leq) of 60 dBA or less. The construction contractor shall place all stationary construction equipment so that emitted noise is directed away from sensitive receptors, to the greatest extent feasible. The construction contractor shall locate pile drivers, or other machinery capable of causing strong vibrations or load noises, such that the rear of the vibratory pile driver or

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		machinery faces toward the noise sensitive receptor when the machine is being utilized, to the greatest extent feasible. • Equipment and material staging areas and equipment maintenance areas shall be located at least 500 feet from sensitive noise receivers, if feasible. • Construction activities should be timed to minimize noise impact on exposed areas, by sequencing the use of equipment with relatively low noise levels versus during noise sensitive periods, routing truck traffic and controlling construction traffic activity to minimize vehicle idling, gear shifting, and accelerating under load, to the greatest extent feasible. • Impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for project construction should be hydraulically or electrically powered to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust can and should be used. External jackets on the tools themselves can and should be used, if such jackets are commercially available and this could achieve a reduction of 5 dBA. Quieter procedures can and should be used, such as drills rather than impact equipment, whenever such procedures are available and consistent with construction procedures. • Construction contracts shall specify that notices shall be sent out to all residences located within 1,000 feet of the Project site at least 15 days prior to commencements of construction. The notices shall include the construction schedule and a telephone number where complaints can be registered with the noise disturbance coordinator. A sign, legible at a distance of 50 feet, shall also be posted at the construction sites throughout construction which includes the same details as the notices. • A "noise disturbance coordinator" shall be established at all construction sites. The disturbance coordinator shall be responsible for responding to any local complaints about construction noise. The disturbance coordinator shall determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and shall be required to implement reasonable measures such that the complaint is resolved. • The construction contractor shall establish a training program for equipment operators to instruct them in methods of operating their equipment to minimize environmental noise, and to inform them of all applicable State and County noise regulations, including the requirements contained in these mitigation measures.
5.12	**Noise**	**MM 12-4** The Project Applicant/Developer shall submit a vibration analysis to the County demonstrating that the pile installation has been designed to limit vibrations to 0.01 peak particle velocity (ppv) inch per second (in/sec) or less at occupied buildings. Design features may include alternate methods of installation that result in reduced vibrations such as pile driving cushions or jetting instead of drilling.

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5.12	**Noise**	**MM 12-5**	For the Project site areas adjacent to 300th Street West, 290th Street West, and Malinda Avenue, the Project Applicant/Developer shall provide information to County demonstrating that plans and specifications require that (1) vibratory rollers shall not be used within 300 feet of occupied residences or that vibratory rollers used within 300 feet of occupied residences shall be operated in the static mode and (2) large bulldozers and scrapers shall not be operated within 150 feet of occupied residences. Alternatively, the Project Applicant/Developer shall provide information to County demonstrating that plans and specifications require that vibratory rollers, large bulldozers, large scrapers, and similar heavy equipment shall be operated to comply with the requirements of Section 12.08.560 of the County Code and that vibrations at residential properties would not exceed 0.01 inch per second (in/sec).
5.12	**Noise**	**MM 12-6**	The Project Applicant/Developer shall provide to each prospective purchaser or tenant with a notice and statement of acknowledgment that shall be executed by the prospective purchaser, lessee, or tenant that the Centennial property will be undergoing continuing development and, depending on relative location, noise from construction activities may be heard. The form and method of distribution of said notice and statement of acknowledgment shall be as approved by the County. Subsequent to Project buildout, this mitigation measure would no longer apply.
5.12	**Noise**	**MM 12-7**	In the event that blasting is necessary in order to fracture non-rippable rock, the Project Applicant/Developer shall prepare a Blasting Plan to be submitted and approved by the County of Los Angeles Fire Department in order to obtain a blasting permit; evidence of this approval shall be submitted to the County of Los Angeles Department of Regional Planning in order to obtain an Explosives Permit. The Blasting Plan shall be prepared in accordance with the United States Department of Interior, Office of Surface Mining (USOSM) standards and shall include, but not be limited to, the following: a. A pre-blast survey. b. The site and location of planned blasting and hours of operation (blasting to be conducted during the daylight hours only). c. Notification of blasting activities to all property owners within one-half mile of the blasting area. This notification shall describe the expected period and frequency that the blasting shall occur and give a contact phone number for any questions or complaints. All complaints shall be responded to in a method deemed satisfactory to the County of Los Angeles Department of Regional Planning. d. The types and amounts of explosives. e. Warning system information. f. Methods of transportation and handling of explosives. g. Minimum acceptable weather conditions. h. Procedures for handling, setting, wiring, and firing explosives. i. Procedures for clearing and controlling access to blast danger. j. Procedures for handling misfires and other unusual occurrences.

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		k. An Emergency Action Plan. l. Material safety data sheet for all explosives or other hazardous materials expected to be used. m. Procedures to ensure compliance with local, State and federal laws. n. Requirements and procedures for vibration monitoring near existing structures during blasting events.
5.13	**Visual Resources**	**MM 13-1** The Project's plans and specifications shall demonstrate the implementation of measures to preserve existing rock outcroppings that are visible from off-site locations along the SR-138. In addition, the County shall review all final development plans (e.g., landscape, lighting, architectural plans)—as provided by the Project Applicant/Developer—to ensure that the development standards for each land use have been implemented to minimize the visual alteration of the site and to create an aesthetically pleasing development.
5.13	**Visual Resources**	**MM 13-2** The Project shall implement the following components of the Green Development Program to minimize potentially adverse visual impacts: • Site the highest density residential uses in areas adjacent to commercial centers and permit residential uses in commercial centers through the Mixed Use Overlay to place larger populations within key centers, encouraging pedestrian activity and a reduction in vehicle trips. • Preserve oak woodlands, savannahs, and other sensitive habitat areas near Oso Canyon and at the foot of the San Gabriel Mountains southerly of SR-138. • Exterior lighting shall not cause unacceptable light trespass and shall be fully shielded. • Outdoor lighting shall be turned off using automatic control devices or systems between the hours of 10:00 PM and sunrise of the following day in commercial, business park, and mixed use areas, unless required by the County Building Code. If the property operates beyond 10:00 PM, then outdoor lighting shall be turned off 1 hour after the operation ends for the day. • Outdoor lighting for safety and security reasons is allowed after 10:00 PM only if fully shielded motion sensors are used to turn off lighting after 10:00 PM and the sensors turn the lighting off automatically no more than 10 minutes after the area is vacated or at least 50 percent of the total lumen levels are reduced or 50 percent of the total outdoor light fixtures are turned off between 10:00 PM and sunrise. • Outdoor lighting in residential and open space areas that are over 15 feet in height shall have an output no greater than 400 lumens. • The maximum height of outdoor lighting fixtures shall be: o 20 feet in Residential and Open Space areas o 30 feet in Commercial, Mixed Use, and Public areas o 35 feet in Business Park areas • Prohibit the use of outdoor lighting that includes drop-down lenses, mercury vapor lights, ultraviolet lights, search lights, laser lights and any outdoor lighting that flashes, blinks, alternates or moves unless mandated for

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		health and safety reasons by a public agency. • Outdoor light fixtures in outdoor recreational areas shall be mounted, aimed, and fully shielded so that light beams fall onto activity areas and no unacceptable light trespass occurs on surrounding areas or properties. Outdoor lighting shall only provide the minimum necessary to illuminate recreational activities areas and shall be no more than 75 feet high. Preferably, these fixtures shall also use high pressure sodium or metal halide lamps. • Outdoor advertising signs, business signs and roof and freestanding signs that are lighted shall be fully shielded. Externally mounted light fixtures shall be mounted on the top of the sign and shall be oriented downward. Externally mounted bulbs or lighting tubes for signs shall not be visible from adjoining properties or public rights-of-way, unless such bulbs or tubes are filled with neon, argon, krypton or other self-illuminating substance.
5.13	**Visual Resources**	**MM 13-3** The existing off-site 66 kV electric lines that extend from SR-138 beginning at approximately the Old Ridge Route to 290th Street West, shall be relocated south of the Business Park area or may be placed underground,.
5.13	**Visual Resources**	**MM 13-4** Structures proposed along the Pacific Crest National Scenic Trail (PCT) shall be screened by a block wall along the rear of the structures abutting the trail and a 34-foot-wide landscaped setback shall be provided that would contain the conceptual PCT realignment.
5.13	**Visual Resources**	***The following edit was identified subsequent to publication of the Final EIR in May 2018 and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors.*** **MM 13-4** Structures proposed along the Pacific Crest National Scenic Trail (PCT) shall be screened by a block wall <u>or comparable screening</u> along the rear of the structures abutting the trail and a 34-foot-wide landscaped setback shall be provided that would contain the conceptual PCT realignment.
5.13	**Visual Resources**	**MM 13-5** Security lighting used for construction areas, equipment, and building materials staging areas shall be directed away from SR-138, 300th Street West, 290th Street West, and existing residences east of 300th Street West and east of 290th Street West and Malinda Avenue. Screening of construction security lighting at construction staging areas shall be implemented, as feasible. Construction equipment and materials staging areas shall be located as far as feasible from surrounding adjacent residences and lights shall be directed away from adjacent on-site residences that are occupied, as each development phase is built.

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5.13	**Visual Resources**	**MM 13-6** An Exterior Lighting Plan shall be prepared in coordination with a qualified Biologist, be reviewed by an Electrical Engineer who is registered in the State of California, and then approved by the County prior to the submittal of each building permit. The Lighting Plan shall apply to all proposed structures and for development areas that border natural open space resources. The Lighting Plan shall be consistent with County Rural Outdoor Lighting District requirements for the Antelope Valley and shall provide guidelines for the outdoor lighting to be used throughout the Project site. Final lighting orientation and design shall be approved by the County. The Lighting Plan shall include, but not be limited to, the following: a. All lighting within 300 feet of natural open space areas shall only be implemented where needed for safety and shall be directed away from these areas and shielded so that light is not directed into open space and riparian areas. Where possible, these safety lights shall be motion sensor activated with infrared light sensors to prevent daytime lighting. b. Mercury vapor and halide lighting shall not be used on the perimeter of the developed areas or adjacent to designated open space. c. Illumination levels should be compatible with the character and use of surrounding development as determined by national lighting organizations. The Illuminating Engineering Society of North America publishes recommendations for the lighting industry that include illumination levels for outdoor lighting. d. Low-pressure sodium lighting fixtures or flashing lights shall not be used except in emergency situations. e. Exterior lighting standards and fixtures shall be located and designed to minimize direct glare beyond the site boundaries. Lighting shall be fully shielded and directed downwards to confine light spread solely within necessary locations. Illumination or glare from the exterior lighting system onto adjacent properties or streets should be minimized. f. Security lighting fixtures shall not project above the roof line of the building on which they are mounted. g. Where applicable, time-control devices shall be utilized on exterior lighting sources. h. Street, parking lot, and structural lighting fixtures shall provide adequate illumination for safety and comfort of vehicular and pedestrian traffic while minimizing light spillover.

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5.14	**Parks and Recreation**	**MM 14-1** The Project shall implement the following components of the Green Development Program to provide healthy outdoor parks and recreational resources on the Project site: • Provide a functional system of community trails, greenway trails, and natural corridors to serve as recreational opportunities and as alternative means of transportation to reduce vehicular traffic. • Provide "complete streets" throughout the community to provide alternative modes of transport (walking, biking, low-speed vehicles (LSVs) such as neighborhood electric scooters, bikes and other low-speed electric vehicles (NEVs). • Incorporate sidewalks (separated by a parkway from streets) and trees to be the main street elements to create a walking environment, promoting pedestrian activity. • Provide Class I – IV bike lanes throughout the Project to ensure a variety of alternative transportation options. • Provide permanently anchored bicycle racks within 200 feet of visitors' entrance of nonresidential buildings, readily visible to passers-by, for 5 percent of new visitor motorized vehicle parking spaces being added, with a minimum of two-bike capacity rack. • For new nonresidential buildings with over 10 tenant-occupants or for additions or alterations that add 10 or more tenant vehicular parking spaces, provide secure bicycle parking spaces at a rate of 5 percent of tenant parking being added, with a minimum of one space. • For residential buildings, provide permanently anchored bicycle racks within 100 feet of the visitor's entrance, readily visible to passers-by, for 5 percent of visitor motorized vehicle parking capacity with a minimum of one two-bike capacity rack. • Nonresidential buildings within the Business Park and Commercial areas with 75,000 or more square feet of gross floor area shall provide locker rooms and shower facilities. • For multifamily buildings, provide on-site bicycle parking for at least one bicycle per every two dwelling units • Include planned green space, which are integrated pockets of open space (including greenways, tree stands, hillsides, and community parks) with minimal developed amenities. Planned green space reduces evapotranspiration; allows natural percolation of runoff from adjacent lands; reduces the heat island effect; and adds aesthetic value to a site. Planned green space can provide habitat as well as linkages to other habitat areas.
5.14	**Parks and Recreation**	**MM 14-2** The Project Applicant/Developer shall implement the Parks and Recreation Plan as set forth in Chapter 3.12 of the *Centennial Specific Plan* to provide visually appropriate parks and recreational amenities to the Project site.
5.14	**Parks and Recreation**	**MM 14-3** The Project Applicant/Developer shall construct 163 acres of parks consistent with the Park Overlay requirements of the Centennial Specific Plan, which includes acreage to meet the County's Parkland Dedication Ordinance requirements. In addition, the Project Applicant/Developer will fund the cost of constructing and equipping the public parks within the Project, pursuant to a park Development Agreement, a statutory Development Agreement pursuant to Section 65864 et seq. of the *California Government Code*, or other condition of approval.

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		For purposes of this measure, and as applied to all future Tentative Maps, the County shall deem all parks that are 3.0 acres or more in size as public parks, so long as each park site meets County standards for site suitability. The Project shall provide public parks to be developed in accordance with the schematic designs approved by the County. Neighborhood and community parks shall contain various types of improvements that may include, but not be limited to, parking lot, walkways, plazas and other forms of hardscape, shade trellis, security lighting, trash enclosures, locking gates, fencing, open turf sports fields, basketball courts, multi-purpose ballfields, tennis courts, children's play areas, picnic areas (picnic tables with pads), shade structures/pavilions, restrooms with drinking fountains, recreation building, office and storage space/service yards, trees, landscaping (including plant material, grading, drainage, and irrigation), and park entry monuments.
5.14	**Parks and Recreation**	**MM 14-4** The Project shall provide public parkland in compliance with the County of Los Angeles Parkland Dedication Ordinance/Quimby Act, with all acreage figures stated as "net" (three percent slope, maximum). Additionally, public parks shall be dedicated to the County in a developed condition, in accordance with the schematic designs recommended by the County and/or as approved by the Regional Planning Commission and/or the County Board of Supervisors as part of approval of each tract map as each phase of development occurs throughout the Project site with amenities consistent with County-approved plans. Developed public parks shall also be credited with an equivalency acreage correlating with the current Representative Land Value for the applicable Park Planning Area (currently Park Planning Area 48). All public parks must comply with County's Park Design Guidelines and Standards, Public Parks.
5.14	**Parks and Recreation**	**MM 14-5** The Project shall provide public and private recreation amenities that equate to the acreage requirements of the County of Los Angeles General Plan local parkland standard (4 acres for every 1,000 persons in the unincorporated County). For purposes of monitoring compliance with the General Plan standard, whenever either a Tentative Map or a Final Map is submitted for the County's review and clearance, those maps shall have a table that provides a breakdown of acreage per lot for the following categories: (1) Public Park acreage (maximum slope 3 percent or less); (2) Public Park Acreage Equivalency (which shall be based upon estimated Public Park Improvement Values derived from Total Project Cost Estimates required at the time of map clearance and the Parkland Dedication Ordinance/Quimby Ordinance in effect at the time the map is submitted); (3) Private Park acreage, including pocket parks; (4) Greenway and County multi-use (hiking, equestrian, and mountain biking) trail acreage; (5) Community Recreation Facility acreage; and (6) Private Recreation Facility acreage.
5.14	**Parks and Recreation**	***The following edit was identified subsequent to publication of the Final EIR in May 2018 and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors.*** **MM 14-5** The Project shall provide public and private recreation amenities that equate to the acreage requirements of the County of Los Angeles General Plan local parkland standard (4 acres for every 1,000 persons in the unincorporated County).* For purposes of monitoring compliance with the General Plan standard, whenever either a Tentative Map or a Final Map is submitted for the County's review and clearance, those maps shall have a table that provides a breakdown of acreage per lot for the following categories: (1) Public Park acreage (maximum slope 3 percent or less);

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			(2) Public Park Acreage Equivalency (which shall be based upon estimated Public Park Improvement Values derived from Total Project Cost Estimates required at the time of map clearance and the Parkland Dedication Ordinance/Quimby Ordinance in effect at the time the map is submitted); (3) Private Park acreage, including pocket parks; (4) Greenway and County multi-use (hiking, equestrian, and mountain biking) trail acreage; (5) Community Recreation Facility acreage; and (6) Private Recreation Facility acreage. **Note:* Independent of this measure, an additional 96 acres of designated park space (increasing identified parkland to 6 acres per 1,000 persons) has been voluntarily agreed to by the Project applicant as a component of the Development Agreement. *See* Item 7.1 (entitled "Commitment to Provide Additional Regional Park Land") in Exhibit G of the Development Agreement.
5.15	**Education**	**MM 15-1**	The Project Applicant/Developer shall designate one K-5 and five K–8 school sites in the Project area in accordance with the conceptual land use plan or alternate location(s) that shall be agreed upon by the authorized school districts.
5.15	**Education**	**MM 15-2**	The Project Applicant/Developer shall demonstrate to the County that they have an executed agreement with all school districts that operate within the boundaries of the Project site. The Transportation Management Association shall coordinate with local schools and school districts to establish and maintain a Safe Routes to School program to facilitate students walking and biking to schools.
5.15	**Education**	**MM 15-3**	The Project Applicant/Developer shall designate one high school site in the Project area in accordance with the conceptual land use plan or alternate location(s) that shall be agreed upon by the authorized school district.
5.16	**Fire and Law Enforcement Services**	**MM 16-1**	At buildout, the Los Angeles County Fire Department (LACFD) fire stations shall be located such that response times to the Project site shall be 5 minutes or less for fire service responses and 8 minutes or less for the advanced life support (paramedic) unit responses within the Project site.
5.16	**Fire and Law Enforcement Services**	**MM 16-2**	The Project Applicant/Developer shall pay developer fees in effect at the time of construction permit approval, in accordance with the LACFD Developer Fee Program until such time the Project Applicant/Developer has conveyed an approved, operational fire station to the LACFD. As an alternative to fee payment, the Developer Fee Program allows the LACFD and the Project Applicant/Developer to agree on a program whereby the Project Applicant/Developer would provide land and would construct and equip the fire stations required for the Project in exchange for a credit towards the Project's fee payments.
5.16	**Fire and Law Enforcement Services**	**MM 16-3**	The Project Applicant/Developer shall provide land, convey title, and shall construct and equip, to the specifications and requirements of the LACFD, for up to four new Fire Stations to the LACFD. The approved final plans and specifications for the Project shall identify locations of the fire stations. The LACFD shall have final approval over the fire station site locations. The timing for the construction of the on-site fire stations shall be established by the LACFD dependent upon the phasing of development, with the first on-site fire station operational no later than the time the 1,000th dwelling unit is built on site.

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5.16	**Fire and Law Enforcement Services**	**MM 16-4**	The Project Applicant/Developer shall pay Law Enforcement Facilities Mitigation Fee (LEFMF) to the Los Angeles County Sheriff's Department (LASD) pursuant to the requirements established in County Ordinance No. 2008-0033. The amount of fees to be paid will be determined based on the established fee in Section 22.74.030 of the County Code. The Project incorporates a temporary "store front" sub-station, followed by construction of a permanent LASD Station included on the Project site, in lieu of a portion of the LEFMF, as allowed under Section 22.74.090 (Consideration in Lieu of Fee) of the County Code. Costs associated with the construction of the temporary "store front" sub-station and permanent LASD Station would be credited against the LEFMF. Prior to completion of the permanent LASD Station, the "store front" sub-station may be located on site in Village 1 on the north side of the SR-138. This temporary sub-station shall be properly outfitted in accordance with applicable occupancy requirements of the LASD for such "store front" facilities and shall be operational prior to the approval of the first certificate of occupancy for the first phase of Project development. The Centennial Land Use Plan identifies a conceptual location for one LASD Station in the Business Park area on the Project site north of the SR-138. The permanent LASD Station shall be constructed immediately following completion of the first phase of development. The LASD shall have final approval over the temporary sub-station and permanent LASD Station site locations.
5.17	**Other Public Services**	**MM 17-1**	The *Los Angeles County Code* (Chapter 22.72 of Title 22) ("Library Ordinance") imposes a Library Facilities Mitigation Fee on new residential development projects in the unincorporated areas of the County of Los Angeles served by the County Library (the "Library Facilities Mitigation Fee"). The Library Facilities Mitigation Fee that is in effect for the designated County Library planning area is charged upon approval of each residential building permit and is based on the estimated reasonable cost of providing the projected library facility needs in the applicable library planning area. The Project is located within Planning Area 2: Antelope Valley and, as of the date of this EIR, the Library Facilities Mitigation Fee is $844.00 per residential building permit (based upon the County Library's mitigation fee per building permit amount established on October 27, 1998, and last updated on July 1, 2015). The Project provides for the development of a maximum of 19,333 residential dwelling units. Based on the current fee, the total Library Facilities Mitigation Fee that would be due from the Project Applicant/Developer (or its successors in interest) is $16,317,052. Consistent with the Library Ordinance, the amount of the Library Facilities Mitigation Fee that shall apply to the Project shall be the fee payable on the date the County issues each building permit for a residential dwelling unit. The amount of the Library Facilities Mitigation Fee may be increased from time to time pursuant to Section 22.72.040 of the County Code and State law; provided, however, the Library Facilities Mitigation Fee applicable to residential dwellings within the Project shall be no more than the amount of the Library Facilities Mitigation Fee applicable to residential dwellings outside of the Project but within Planning Area 2. The aggregate Library Facilities Mitigation Fees payable for all of the residential dwelling units within the Project for which building permits have been issued shall be referred to herein as the "Project-Wide Fee Total." The ordinance allows that in lieu of the payment of Library Facilities Mitigation Fees, the Project Applicant/Developer shall fulfill the obligations required by the mitigation measures in this EIR, to satisfy the requirements of the Library Ordinance.

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5.17	**Other Public Services**	**MM 17-2**	Section 22.72.090 of the Library Ordinance permits the County Librarian to accept substitute consideration in lieu of the Library Facilities Mitigation Fee if the proposed substitute consideration (such as land, facility construction, and/or materials) (i) has a value that is equal to or greater than the applicable Library Facilities Mitigation Fee that is otherwise due; (ii) is in the form acceptable to the County Librarian; and (iii) is within the scope of the applicable library facilities project. Because the Library Facilities Mitigation Fee only allows for an incremental accumulation of funds for future library facilities as building permits are issued and fees are collected pursuant to Section 22.72.060 of the County of Los Angeles Code, the County Library will implement a strategy that will better serve the residents of Centennial by ensuring that the timing and scope of public library facilities will meet the demands of the community. Centennial desires to cooperate with the County Library in meeting its goals and also seeks certainty with respect to the amount and timing of the Project's financial commitment to the County Library. Therefore, the parties' objectives will be satisfied if, in lieu of the Project Applicant/Developer's payment of Library Facilities Mitigation Fees at the time residential building permits are pulled in accordance with Section 22.72.060 of the County Code, the Project Applicant/Developer will instead set aside the land and contribute the funds required to build and equip a turnkey Permanent Facility, all in accordance with the terms and conditions of the Development Agreement. As discussed in MM 17-1, the Project Applicant/Developer's provision of such land and funding will, in accordance with the required mitigation measures, be credited against Library Facilities Mitigation Fees that would otherwise be due.
5.17	**Other Public Services**	**MM 17-3**	The Project Applicant/Developer shall dedicate to the County Library up to 2.62 acres within Village 3 of the Project (the "Dedicated Land") for public library purposes or other location for the permanent facility mutually agreed upon by the County Librarian and the Project Applicant/Developer. The Project Applicant/Developer shall receive a credit against unpaid Library Facilities Mitigation Fees in an amount equal to the fair market value of all Dedicated Land as of the date of the dedication to the County of Los Angeles for County Library purposes. The Dedicated Land shall be conveyed to the County concurrently with the filing and recordation of the final map within which the Dedicated Land is located. If the County Library desires to increase the size of the Dedicated Land, it shall make such request of the Project Applicant/Developer no later than the date that the County approves the tentative map for the proposed subdivision in which the Dedicated Land is located. the Project Applicant/Developer agrees to increase the size of the Dedicated Land upon the County's request provided: (i) the County cooperates with the Project Applicant/Developer in any related land use boundary changes, transfers or conversions necessary to accommodate the larger library site, subject to the requirements of CEQA and (ii) the County either pays the fair market value for such land with either (A) U.S. funds or (B) a dollar-for-dollar credit against unpaid Library Facilities Mitigation Fees, so long as the Project-Wide Fee Total has not already been offset pursuant to MM 17-4 through MM 17-7. "Fair market value" for the land described in this paragraph shall be determined based on the value of such land had it been entitled for institutional office purposes and the property had a maximum floor area ratio (FAR) of 0.25. If the County Library at any time changes the use of the Dedicated Land from that of a County-owned public library facility, then the Dedicated Land will revert back to Centennial.

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#	Environmental Factor	Mitigation
5.17	**Other Public Services**	***The following edit was identified subsequent to publication of the Final EIR in May 2018 and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors.*** **MM 17-3** The Project Applicant/Developer shall dedicate to the County Library one (1) site of up to 2.62 acres within Village 3 of the Project (the "Dedicated Land") for public library purposes or other location for the permanent facility mutually agreed upon by the County Librarian and the Project Applicant/Developer. The Project Applicant/Developer shall receive a credit against unpaid Library Facilities Mitigation Fees in an amount equal to the fair market value of all Dedicated Land as of the date of the dedication to the County of Los Angeles for County Library purposes. The Dedicated Land shall be conveyed to the County concurrently with the filing and recordation of the final map within which the Dedicated Land is located. If the County Library desires to increase the size of the Dedicated Land, it shall make such request of the Project Applicant/Developer no later than the date that the County approves the tentative map for the proposed subdivision in which the Dedicated Land is located. T~~t~~he Project Applicant/Developer agrees to increase the size of the Dedicated Land upon the County's request provided: (i) the County cooperates with the Project Applicant/Developer in any related land use boundary changes, transfers or conversions necessary to accommodate the larger library site, subject to the requirements of CEQA and (ii) the County either pays the fair market value for such land with either (A) U.S. funds or (B) a dollar-for-dollar credit against unpaid Library Facilities Mitigation Fees, so long as the Project-Wide Fee Total has not already been offset pursuant to MM 17-4 through MM 17-7. ~~"Fair market value" for the land described in this paragraph shall be determined based on the value of such land had it been entitled for institutional office purposes and the property had a maximum floor area ratio (FAR) of 0.25.~~ If the Dedicated Land is not used for a County Library ~~at any time changes the use~~ within ten (10) years of the land's conveyance, or if the Dedicated Land ~~from that of~~ is not fully used for a ~~County-owned public~~ library ~~facility~~ or another use by the County that is mutually approved by the County and Project Applicant/Developer, then the Dedicated Land (or portion thereof) will revert back to ~~Centennial~~ the Project Applicant/Developer.
5.17	**Other Public Services**	**MM 17-4** The Project Applicant/Developer shall provide plans and specifications with a one or two-story, turn-key public library building (the "Permanent Facility") on the Dedicated Lands. The Permanent Facility may be constructed in phases. The size and scope of the Permanent Facility will be determined by the County Librarian in consultation with the Project Applicant/Developer provided, however, that the Project Applicant/Developer's maximum financial contribution shall not exceed the Project-Wide Fee Total, less any offsets pursuant to Mitigation Measures 17-4, 17-6, and 17-7 in this EIR. The sizing, design and programming of the Permanent Facility, including the influence of technology on library services, will be agreed upon by representatives from County Library and the Project Applicant/Developer. A report shall be prepared by an independent library consultant selected by the County Library that will solicit input from the community with respect to the types of library services desired at the Permanent Library Facility. The consultant's report shall be paid for by the Project Applicant/Developer and the Project Applicant/Developer shall receive a credit against the Project-Wide Fee Total for the Project Applicant/Developer's payment of such costs. The Permanent Facility and Permanent Library furniture, fixture, and equipment (FF&E, as defined below) will be substantially similar in quality and materials to the Quartz Hill branch of the County Library on November 2016. The design of the Permanent Library will be performed by an architect mutually selected by the

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#	Environmental Factor	Mitigation
		Project Applicant/Developer and the County Librarian. The Permanent Facility must comply with all requirements of the County Library's Low Voltage Specifications in effect on the date the design contract for the Permanent Facility is fully executed. The County Library shall be responsible for all costs of design and construction of the Permanent Library in excess of the Project Applicant/Developer's Library Facilities Mitigation Fee obligations hereunder. If, after application of the fee credits against Library Facilities Mitigation Fees to which the Project Applicant/Developer is entitled, there is insufficient funds to construct the Permanent Facility and purchase the Permanent Library FF&E, the Project Applicant/Developer shall not be required to fund construction of the Permanent Facility until additional and sufficient funds are authorized by the County to construct the Permanent Facility and to procure the Permanent Library FF&E. The Permanent Facility will be completed and operational on a date agreed to between the County Librarian and the Project Applicant, subject to force majeure and events within the control of the County (such as, for example, the County's failure to pay any funding shortfalls if credits against the Project-Wide Fee Total are exhausted). The size of the Permanent Facility will be proportionately reduced in size and materials if the County approves less than the 19,333 residential units proposed for the Centennial Project.
5.17	**Other Public Services**	***The following edit was identified subsequent to publication of the Final EIR in May 2018 and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors.*** **MM 17-4** The Project Applicant/Developer shall provide plans and specifications with a one or two-story, turn-key public library building (the "Permanent Facility") on the Dedicated Lands. The Permanent Facility may be constructed in phases. The size and scope of the Permanent Facility will be determined by the County Librarian in consultation with the Project Applicant/Developer provided, however, that the Project Applicant/Developer's maximum financial contribution shall not exceed the Project-Wide Fee Total, less any offsets pursuant to Mitigation Measures 17-4, 17-6, and 17-7 in this EIR. The sizing, design and programming of the Permanent Facility, including the influence of technology on library services, will be agreed upon by representatives from County Library and the Project Applicant/Developer. A report shall be prepared ~~by an independent library consultant selected by~~ in connection with the ~~County Library~~ preparation of the architectural design parameters that will solicit input from the community with respect to the types of library services desired at the Permanent Library Facility. The consultant's report shall be paid for by the Project Applicant/Developer and the Project Applicant/Developer shall receive a credit against the Project-Wide Fee Total for the Project Applicant/Developer's payment of such costs. The Permanent Facility and Permanent Library furniture, fixture, and equipment (FF&E, as defined below) will be substantially similar in quality and materials to the Quartz Hill branch of the County Library on November 2016. The design of the Permanent Library will be performed by an architect mutually selected by the Project Applicant/Developer and the County Librarian. The Permanent Facility must comply with all requirements of the County Library's Low Voltage Specifications in effect on the date the design contract for the Permanent Facility is fully executed. The County Library shall be responsible for all costs of design and construction of the Permanent Library in excess of the Project Applicant/Developer's Library Facilities Mitigation Fee obligations hereunder. If, after application of the fee credits against Library Facilities Mitigation Fees to which the Project Applicant/Developer is entitled, there is insufficient funds to construct the Permanent Facility and purchase the Permanent Library FF&E, the Project

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#	Environmental Factor	Mitigation	
			Applicant/Developer shall not be required to fund construction of the Permanent Facility until additional and sufficient funds are authorized by the County to construct the Permanent Facility and to procure the Permanent Library FF&E. The Permanent Facility will be completed and operational on a date agreed to between the County Librarian and the Project Applicant, subject to force majeure and events within the control of the County (such as, for example, the County's failure to pay any funding shortfalls if credits against the Project-Wide Fee Total are exhausted). The size of the Permanent Facility will be proportionately reduced in size and materials if the County approves less than the 19,333 residential units proposed for the Centennial Project.
5.17	**Other Public Services**	**MM 17-5**	The Project Applicant/Developer agrees to install furniture, fixtures and equipment ("Permanent Library FF&E") and purchase library materials in connection with the Permanent Facility, provided that the Project Applicant/Developer's financial contribution toward the cost of the Permanent Library FF&E and library materials shall not exceed the Project-Wide Fee Total when taken together with all other Project Applicant/Developer expenses then credited against the Project-Wide Fee Total. The County Library shall be responsible for all costs of Permanent Library FF&E and library materials in excess of the Project-Wide Fee Total. The Permanent Library FF&E specifications will be provided by the County Library. Any FF&E purchased shall remain the property of the County Library.
5.17	**Other Public Services**	**MM 17-6**	The Project Applicant/Developer shall provide plans and specifications that demonstrate on-site parking for library patrons at a ratio of 4 parking spaces per 1,000 gross square feet of library space. The parking lot shall also include two spaces adjacent to the staff entrance of the library for County library service vehicles. Parking may be shared with adjacent uses with the consent of the County Library.
5.17	**Other Public Services**	**MM 17-7**	If the Project Applicant/Developer has satisfied its obligations in Mitigation Measures 17-1 through 17-6, above, and the Project Applicant/Developer continues to pull building permits within the Project, then the Project Applicant/Developer (or its successors in interest) shall pay any Library Facilities Mitigation Fees still owing as construction permits are issued, which shall be expended by the County Library for the benefit of the Permanent Facility on library materials, FF&E, facility enhancements or library programs as determined by the County Librarian.
5.17	**Other Public Services**	**MM 17-8**	No later than December 1 and July 1 of each calendar year, the Project Applicant/Developer shall deliver to the County Library a report in writing providing the number of residential building permits actually issued to date. Within 30 days from the date the report is received, the County Library will deliver, or cause to deliver, to the Project Applicant/Developer a report on the revised Project-Wide Fee Total.
5.17	**Other Public Services**	**MM 17-9**	The Project Applicant/Developer shall be responsible for implementing the following construction waste reduction requirements to ensure that 100 percent of soil is diverted during grading activities, and that at least ~~70~~ 75 percent of nonhazardous construction and demolition waste is diverted from landfill disposal. During all construction phases, wastes would be managed with the use of recycling bins for various debris materials which would be sent to existing recycling and/or processing facilities in accordance with all provisions of the County Construction and Demolition Debris Ordinance. This would include submitting and implementing a Recycling and Reuse Plan to Public Works in connection with obtaining a building or grading permit.

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#	Environmental Factor	Mitigation
5.17	**Other Public Services**	**MM 17-10** The Project shall incorporate the Solid Waste Management Plan (Section 3.7 of the Centennial Specific Plan) and the Property Owner/Developer shall be responsible for implementation of the following operational waste reduction requirements to ensure that at least 75 percent of operational waste is diverted from landfill disposal: • The Property Owner/Developer shall process an on-site contract with a waste management company and/or recyclers, and/or self-haul to waste and recycling facilities to properly recycle, divert, and dispose of solid waste generated on-site. Throughout the Project's operation, the waste hauler shall be required by contract to maintain records showing the diversion of not less than 75 percent of the operational waste generated by the Project. • The waste management contract will establish dedicated cans for green waste and a Green Waste Recycling Plan that must be adhered to by landscape maintenance companies as part of the CC&Rs. The CC&Rs will require the use of mulching mowers or mowers with mulching blades for common lawn area, use of California Air Resources Board- (CARB) approved or electric maintenance equipment; placing three to five inches of mulch in common areas' planting beds each year as part of the Landscape Maintenance Plan for all non-residential and multi-family buildings; and diverting organic wastes to a mulching and composting facility or anaerobic digestion facility. • The CC&Rs will require the Property Owner to recycle and divert from the waste bin, solids such as metal, glass, paper, plastic, cardboard, food and yard waste; and divert from the waste bin hazardous waste, electronic waste, and universal waste. Information on items prohibited from landfill disposal and on recycling and composting will be provided to Property Owners. • Household hazardous wastes and less commonly disposed materials (such as electronics and appliances) shall have seasonal pickup (at least two times a year) and residents would be notified of upcoming events. • Semi-annual "exchange days" shall be organized, publicized, and paid for by the Master Homeowners Association (HOA). • The Project Applicant/Master Developer shall set aside a minimum of 5 acres for a future Materials Recovery Facility/Transfer Station (MRF/TS) that includes a household hazardous waste permanent collection and reuse center and allows for mulching/composting operations. The site shall be located in a suitable location with the capacity to manage the nonhazardous solid waste and household hazardous waste generated by the Centennial Development Project at buildout. The Project Applicant/Master Developer shall prepare and grade the site, and install basic mainline infrastructure fronting the property prior to the issuance of any occupancy permits associated with the first phase of project implementation. The Master Developer shall continually encourage a waste management company to build these facilities on this build ready site. The CC&R for the future MRF/TS site shall require the land to be set aside for the MRF/TS in perpetuity. • The Smart Gardening Learning Center specifications will be provided by County Public Works. • Parking for the Learning Center and the MRF/TS may be shared with adjacent uses with the consent of the property owners and County Public Works.

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#	Environmental Factor	Mitigation
5.17	**Other Public Services**	***The following edit was identified subsequent to publication of the Final EIR in May 2018 and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors.*** **MM 17-10** The Project shall incorporate the Solid Waste Management Plan (Section 3.7 of the Centennial Specific Plan) and the Property Owner/Developer shall be responsible for implementation of the following operational waste reduction requirements to ensure that at least 75 percent of operational waste is diverted from landfill disposal, which shall be posted on the community intranet, and shall be clearly described and distributed to home buyers through their home purchase contracts and CC&Rs: • The Property Owner/Developer shall process an on-site contract with a waste management company and/or recyclers/composters, and/or self-haul to waste and recycling facilities to properly recycle, divert, compost, and dispose of solid waste generated on-site. Throughout the Project's operation, the waste hauler shall be required by contract to maintain records showing the diversion of not less than 75 percent of the operational waste generated by the Project. • The waste management contract will establish dedicated cans for green waste and a Green Waste Recycling Plan that must be adhered to by landscape maintenance companies as part of the CC&Rs. The CC&Rs will require the use of mulching mowers or mowers with mulching blades for common lawn area, use of California Air Resources Board- (CARB) approved or electric maintenance equipment; placing three to five inches of mulch in common areas' planting beds each year as part of the Landscape Maintenance Plan for all non-residential and multi-family buildings; and diverting organic wastes to a mulching and composting facility or anaerobic digestion facility. • The CC&Rs will require the Property Owner to recycle and divert from the waste bin, solids such as metal, glass, paper, plastic, cardboard, food and yard waste; and divert from the waste bin hazardous waste, electronic waste, and universal waste. Information on items prohibited from landfill disposal and on recycling and composting will be provided to Property Owners. • Household hazardous wastes and less commonly disposed materials (such as electronics and appliances) shall have seasonal pickup (at least two times a year) and residents would be notified of upcoming events. • Semi-annual "exchange days" shall be organized, publicized, and paid for by the Master Homeowners Association (HOA). • The Project Applicant/Master Developer shall set aside a minimum of 5 acres for a future Materials Recovery Facility/Transfer Station (MRF/TS) that includes a household hazardous waste permanent collection and reuse center and allows for mulching/composting operations. The site shall be located in a suitable location with the capacity to manage the nonhazardous solid waste and household hazardous waste generated by the Centennial Development Project at buildout. The Project Applicant/Master Developer shall prepare and grade the site, and install basic mainline infrastructure fronting the property prior to the issuance of any occupancy permits associated with the first phase of project implementation. The Master Developer shall continually

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#	Environmental Factor	Mitigation
		encourage a waste management company to build these facilities on this build ready site. The CC&R for the future MRF/TS site shall require the land to be set aside for the MRF/TS in perpetuity. • The Smart Gardening Learning Center specifications will be provided by County Public Works. • Parking for the Learning Center and the MRF/TS may be shared with adjacent uses with the consent of the property owners and County Public Works.
5.18	**Water Resources**	**MM 18-1** In addition to complying with the water efficiency and conservation set forth in Divisions 4.3 and 5.3 of the California Green Building Standards (CALGreen) Code or the County Green Building Standards Code, whichever are more stringent, the Project Applicant/Developer shall implement the measures listed below. **Meter Water Use.** Install, maintain, and monitor all non-construction potable and non-potable water use using appropriate metering equipment throughout the site. **Reduce Potable Water Use with On-Site Recycled Water.** Install, maintain, and operate on-site wastewater treatment and conveyance facilities that provide recycled water treated to California Title 22 unrestricted reuse standards from on-site wastewater. Recycled water shall be used to meet (i) 100 percent of commercial, business park, institutional, school, hotel, park, and slope irrigation demand and (ii) outdoor irrigation demand in 50 percent of the total very low and low density residential lot landscaped area. **Water Efficient Appliances**. Require installation of water-efficient major appliances (washers, dryers, dishwashers) in compliance with the California Appliance Efficiency Regulations, Energy Star®, or other applicable standards. **Water Efficient Irrigation**. Require the installation of irrigation equipment with a minimum 0.80 irrigation efficiency for all public and private park, recreation and entertainment land use, arterial roadway, and slope irrigation uses. Water Smart/Evapotranspiration-based controllers shall be used. Low water use plants and shrubs shall be used in all irrigated slope areas with an average plant factor of 0.2, as defined in the State Model Water Efficient Landscape Ordinance. **Water Budget Based Water Rates**. Require that the Project Water Purveyor implement water budget based rates in compliance with all applicable legal requirements and in a manner consistent with the use of such rates by other water districts in California (e.g., Irvine Ranch Water District). The water budget based rates shall incorporate and be designed to ensure that Project potable water use meets or exceeds the following standards and adjusted as may be required to meet more stringent standards that may be adopted by the State or Los Angeles County: 1. Indoor Water Use Standards (a) Residential indoor water use – 55 gallons per capita per day (b) Commercial indoor water use – 200 gallons per day per thousand square feet

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#	Environmental Factor	Mitigation
		(c) Business Park indoor water use – 65 gallons per day per thousand square feet, including recycled water for commercial wastewater and cooling use except where prohibited by applicable law for particular types of areas or uses (e.g., employee cafeterias) (d) Institutional indoor water use – 50 gallons per day per thousand square feet (e) Hotel indoor water use – 125 gallons per day per room. 2. Outdoor Water Use Standards (a) Residential outdoor water use – 55 percent of the reference evapotranspiration rate for the Project site (b) Commercial, industrial, and institutional outdoor use – 45 percent of the reference evapotranspiration rate for the Project site
5.18	**Water Resources**	***The following edit was identified subsequent to publication of the Final EIR in May 2018 and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors.*** **MM 18-1** In addition to complying with the water efficiency and conservation set forth in Divisions 4.3 and 5.3 of the California Green Building Standards (CALGreen) Code or the County Green Building Standards Code, whichever are more stringent, the Project Applicant/Developer shall implement the measures listed below. **Meter Water Use.** Install, maintain, and monitor all non-construction potable and non-potable water use using appropriate metering equipment throughout the site. **Reduce Potable Water Use with On-Site Recycled Water.** Install, maintain, and operate on-site wastewater treatment and conveyance facilities that provide recycled water treated to California Title 22 unrestricted reuse standards from on-site wastewater. Recycled water shall be used to meet (i) 100 percent of commercial, business park, institutional, school, hotel, park, and slope irrigation demand and (ii) outdoor irrigation demand in 50 percent of the total very low and low density residential lot landscaped area. **Water Efficient Appliances**. Require installation of water-efficient major appliances (washers, dryers, dishwashers) in compliance with the California Appliance Efficiency Regulations, Energy Star®, or other applicable standards. **Water Efficient Irrigation**. Require the installation of irrigation equipment with a minimum 0.80 irrigation efficiency for all public and private park, recreation and entertainment land use, arterial roadway, and slope irrigation uses. Water Smart/Evapotranspiration-based controllers shall be used. Low water use plants and shrubs shall be used in all irrigated slope areas with an average plant factor of 0.2, as defined in the State Model Water Efficient Landscape Ordinance. **Water Budget Based Water Rates**. Require that the Project Water Purveyor implement water budget based rates in compliance with all applicable legal requirements and in a manner consistent with the use of such rates by other water districts in California (e.g., Irvine Ranch Water District). The water budget based rates shall incorporate and

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#	Environmental Factor	Mitigation
		be designed to ensure that Project potable water use meets or exceeds the following standards and adjusted as may be required to meet more stringent standards that may be adopted by the State or Los Angeles County: 1. Indoor Water Use Standards (a) Residential indoor water use – 55 gallons per capita per day (b) Commercial indoor water use – 200 gallons per day per thousand square feet (c) Business Park indoor water use – 65 gallons per day per thousand square feet, including recycled water for commercial wastewater and cooling use except where prohibited by applicable law for particular types of areas or uses (e.g., employee cafeterias) (d) Institutional indoor water use – 50 gallons per day per thousand square feet (e) Hotel indoor water use – 125 gallons per day per room. 2. Outdoor Water Use Standards (a) Residential outdoor water use – 55 percent of the reference evapotranspiration rate for the Project site (b) Commercial, industrial, and institutional outdoor use – 45 percent of the reference evapotranspiration rate for the Project site 3. Water meters shall be required to measure potable water use and may be required to measure recycled water usage at commercial, recreational, and institutional uses; and to monitor single family home lots via sample home survey selection criteria.
5.18	**Water Resources**	**MM 18-2** The Project Applicant/Developer shall submit to the County Water Use Reports prepared by a qualified specialist to the satisfaction of the County to verify that projected water use efficiencies are being achieved (1) at the end of the 5th year following first occupancy or occupancy of the 4,000th dwelling unit, whichever occurs later and (2) at the end of the 10th year following first occupancy or occupancy of the 10,000th dwelling unit, whichever occurs later. In the event that a Water Use Report indicates that consumption exceeds projected levels, response measures must be implemented to ensure that available supplies will be sufficient to meet future demand. No further development will be approved until additional measures are implemented to achieve the required efficiencies and/or provide additional water supplies, as confirmed by the Project Water Purveyor. No subsequent Tentative Maps shall be approved until the Project Water Purveyor has demonstrated to the satisfaction of the County that the implementation of specific water demand and supply response measures will ensure that available supplies will meet future Project demand.
5.19	**Wastewater Collection**	**MM 19-1** The Project Applicant/Developer shall provide documentation to the County that it has completed all required procedures and has paid all applicable fees associated with establishing the Project Water Purveyor, or an alternate qualified public utility district, as the operator of the WRFs.

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5.19	**Wastewater Collection**	**MM 19-2** The Project Applicant/Developer shall demonstrate that the Project has either been annexed into an existing qualified public utility district (e.g. Golden Valley Municipal Water District) or that a new public utility district (e.g. Project Water Purveyor) has been created to serve the Project. The Project Water Purveyor or alternate qualified public utility district shall be responsible for the design, construction, and operation of the wastewater facilities, and shall ensure compliance with all applicable standards and regulations, including all Lahontan RWQCB and Title 22 requirements of the California Code of Regulations. Wastewater treatment facilities, effluent facilities, and sewer lift stations shall be designed with emergency backup power sources and spill containment features, which shall be provided to the satisfaction of the Lahontan RWQCB.
5.19	**Wastewater Collection**	**MM 19-3** The Project shall incorporate the Wastewater Management Plan (*Centennial Specific Plan*, Section 3.5), and the Project Applicant/Developer shall prepare a Facilities Report, a Pump Station Feasibility Report, and a Sewer Area Study consistent with County Policies and Requirements.
5.19	**Wastewater Collection**	**MM 19-4** The Project Applicant/Developer shall provide the County with plans and specifications that have been prepared in accordance with the Project Water Purveyor or alternate qualified public utility district requirements and standards that demonstrate that the WRF West shall serve the Project site west of the West Branch of the California Aqueduct. The facility shall be located on an approximate 3-acre site and shall treat an average flow of approximately 0.34 million gallon per day. Biosolids shall be hauled to a suitable landfill or used for conversion into fertilizer products.
5.19	**Wastewater Collection**	**MM 19-5** The Project Applicant/Developer shall provide the County with plans and specifications that have been prepared in accordance with the Project Water Purveyor or alternate qualified public utility district requirements and standards that demonstrate that the WRF East shall serve the Project site east of the West Branch of the California Aqueduct. WRF East will be located near the northeasterly corner of the Project and shall treat an average flow of 4.28 million gallons per day. Biosolids shall be hauled to a suitable landfill or used for conversion into fertilizer products. Lined seasonal recycled water storage ponds shall be implemented as required to temporarily store recycled water during times of low demand. The ponds shall implement feasible and applicable wastewater treatment facility best management practices for mosquito and health vector recommended in the California Department of Public Health's 2012 *Best Management Practices for Mosquito Control in California: Recommendations of the California Department of Public Health and the Mosquito and Vector Control Association of California.*
5.19	**Wastewater Collection**	**MM 19-6** Recycled water from Project Wastewater Reclamation Facilities that is used in a manner that could accidentally recharge groundwater shall meet the groundwater quality objectives in the Lahontan Basin Plan for nitrate as nitrogen, or 10 milligrams per liter based on the California state drinking water standard as referenced in the Lahontan Basin Plan for groundwater quality objectives of 45 milligrams per liter of nitrate as nitrate.

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5.19	**Wastewater Collection**	**MM 19-7** The Project Applicant/Developer shall provide an evaluation of alternate disinfection measures, including the use of ultraviolet disinfection, for water treatment at the eastern wastewater reclamation facility (WRF East) and the western wastewater reclamation facility (WRF West), and provide a recommendation regarding the most efficient and effective means of disinfection to the Lahontan Regional Water Quality Control Board (Lahontan RWQCB) for review. The WRF East and WRF West shall be designed to the satisfaction of the Lahontan RWQCB, with appropriate disinfection measures to ensure that any incidental recharge from the use of recycled water will not adversely affect receiving groundwater.
5.20	**Dry Utilities**	**MM 20.2-1** The Project Applicant/Developer shall coordinate with Southern California Edison (SCE) to ensure that there are no prolonged disruptions to the existing transmission lines that extend through the Project study area and to coordinate in the design and implementation of future electrical service and facilities (e.g., transmission lines, access road) in the Project study area. This will ensure that: (1) no prolonged service disruptions during the extension and upgrading of these services would arise; (2) the nature, design, and timing of electrical system improvements are in accordance with all SCE requirements; and (3) the improvements are adequate to serve the proposed land uses and are available for the first occupied land uses.
5.20	**Dry Utilities**	**MM 20.2-2** The Project Applicant/Developer shall provide the County with plans and specifications that demonstrate a future substation shall be constructed in the eastern half of the Project site to serve Project development in the easterly portion of the Project site. To provide adequate capacity for electrical services for the Project, SCE would select one or both of the following two options to implement: (1) reconfigure the Bailey Substation or (2) upgrade the Gorman Substation and retrofit the existing overhead power lines. An electrical ~~generation and distribution~~ infrastructure system shall be constructed as part of the main utility corridors for dry utilities. The timing of construction, as well as specific facility location and sizing, shall be coordinated with SCE.
5.20	**Dry Utilities**	**MM 20.3-1** The Project Applicant/Developer shall coordinate with the Southern California Gas Company (SoCalGas) in the design and implementation of future natural gas service and facilities in the Project study area to ensure that (1) no prolonged service disruptions during the extension and upgrade of these services would arise; (2) the nature, design, and timing of natural gas system improvements are in accordance with SoCalGas requirements; and (3) the improvements are adequate to serve the Project, to be in place for the first occupied land uses.
5.20	**Dry Utilities**	**MM 20.3-2** The Project Applicant/Developer shall install, bond for, or otherwise provide on-site natural gas facilities in coordination with SoCalGas.
5.20	**Dry Utilities**	**MM 20.3-3** An additional regulator station shall be constructed by SoCalGas to loop the distribution system for increased reliability. The timing for development of this station shall be determined by SoCalGas through an assessment of the system's operational needs. The timing for construction of this facility, as well as the specific location and sizing, shall be coordinated with SoCalGas.

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5.20	**Dry Utilities**	**MM 20.4-1** The Project Applicant/Developer shall coordinate with AT&T in the design and implementation of future telecommunications service and facilities within the Project study area to ensure that: (1) no prolonged service disruptions during the extension and upgrading of these services would arise; (2) the nature, design, and timing of telecommunications system improvements are in accordance with AT&T requirements; and (3) the improvements are adequate to serve the proposed land uses.
5.20	**Dry Utilities**	**MM 20.5-1** The Project Applicant/Developer shall coordinate with the Cable Television Service Provider in the design and implementation of future communication service and facilities within the Project study area to ensure that (1) no prolonged service disruptions during the extension and upgrading of these services would arise; (2) the nature, design, and timing of cable system improvements are in accordance with the Cable Service Provider's requirements; and (3) the improvements are adequate to serve the proposed land uses. The cable service connections shall be available at the property lines.
5.21	**Climate Change**	**MM 21-1** The Project Applicant/Developer shall provide the County with plans and specifications that demonstrate 50 percent of the Project's anticipated electrical energy demand at buildout shall be satisfied from on-site renewable energy generation. "Anticipated electrical energy demand" shall be determined on the basis of the anticipated loads for each building as shown in the reports submitted at the time of building permit application pursuant to the Building Energy Efficiency Standards of Title 24. "On-site renewable energy generation" includes, but is not limited to, solar, wind, geothermal, biofuel and hydroelectric systems. These systems shall be installed in connection with the development of one or more of the following: residential units, nonresidential buildings, public buildings, or Specific Plan utility facilities located either within the Specific Plan area or within its immediate vicinity.
5.21	**Climate Change**	**MM 21-2** The Project's plans and specifications shall demonstrate compliance with California Green Building Standards (CALGreen) Code voluntary measure A4.203.1.2.1 Tier 1 for newly-constructed low-rise residential buildings. Therefore, the energy efficiency of these buildings would exceed 2016 Title 24 requirements by 15 percent. Low rise buildings are three stories or less. The Project shall incorporate the Green Development Program (*Centennial Specific Plan*, Appendix 2A), and the Project Applicant/Developer shall be responsible for the implementation of this requirement, which may include energy reduction measures such as use of high performance glazing, radiant heat roof barriers, insulation of all pipes, programmable thermostats, fluorescent and LED bulbs, solar access, sealed ducts, strategic placement of trees and other shading devices. All single-family homebuyers shall have the option to include a photovoltaic array system.
5.21	**Climate Change**	**MM 21-3** The Project's plans and specifications shall demonstrate compliance with CALGreen voluntary measure A5.203.1.2.1 Tier 1 for nonresidential buildings (e.g. hotel, high-rise residential), thereby exceeding the 2016 Title 24 energy efficiency requirements for these buildings by 10 percent. The Project shall incorporate the Green Development Program (Centennial Specific Plan, Appendix 2A), and the Project Applicant/Developer shall be responsible for the implementation of this requirement, which may include energy reduction measures such as high performance glazing, radiant heat roof barriers, high-efficient HVAC with hot-gas reheat, insulation of all pipes, programmable thermostats, fluorescent and LED bulbs, solar access, sealed ducts, zero use of CFC refrigerants in commercial buildings, strategic placement of trees, and other shading devices. Commercial structures shall include passive solar

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CENTENNIAL SPECIFIC PLAN MITIGATION SUMMARY

#	Environmental Factor	Mitigation
		design techniques, such as a north-south panel orientation on buildings, and shall install operable windows designed to maximize natural ventilation by opening into prevailing west winds at inlets and away outlets, thereby reducing use of interior climate controls.
5.21	**Climate Change**	**MM 21-4** The Project Applicant/Developer shall require in contract specifications, that contractors limit construction equipment idling to 3 minutes and include a program to ensure that equipment operators comply with the 3-minute limit.
5.21	**Climate Change**	**MM 21-5** The Project Applicant/Developer shall provide plans and specifications to the County demonstrating that a minimum of 70 percent of public and community pools and spas shall be equipped with active solar heating systems where heating is necessary or desired. The Project Applicant/Developer shall provide the proposed plan for compliance with this provision prior to obtaining a permit for the pool.
5.21	**Climate Change**	***The following edit was identified subsequent to publication of the Final EIR in May 2018 and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors.*** **MM 21-5** The Project Applicant/Developer shall provide plans and specifications to the County demonstrating that <u>all</u> ~~a minimum of 70 percent of~~ public and community pools and spas shall be equipped with active solar heating systems where heating is necessary or desired. The Project Applicant/Developer shall provide the proposed plan for compliance with this provision prior to obtaining a permit for the pool.
5.21	**Climate Change**	**MM 21-6** Deeds, CC&Rs or similar legal documents shall contain the following requirement: The owners of all single-family and multi-family residential units shall be required, upon resale, to present to the buyer a written energy audit checklist prepared by a qualified third party at the time the seller provides the buyer with the Real Estate Transfer Disclosure Statement required by California Civil Code, Section 1102 et seq. The energy audit checklist shall certify that all HVAC systems, thermostats, appliances, windows and swimming pools (if applicable) are the same as those originally installed or, if changed, otherwise comply with Centennial's Green Development Program. All residential pool covers shall be removable, and shall not be automatic retractable covers. The CC&Rs of the master homeowners association or other applicable association shall require compliance with the provisions of this measure and shall provide notice to individual owners of the resale energy audit checklist requirement. The master homeowners association or other applicable association shall monitor compliance and provide the County with an annual report of compliance with this measure.

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#	Environmental Factor	Mitigation
5.21	**Climate Change**	**MM 21-7** Deeds, CC&Rs, or similar legal documents shall contain the following requirement: For nonresidential buildings, within ninety (90) days after the end of the first full calendar year following the issuance of the certificate of occupancy and within ninety (90) days after each five year period thereafter, the owner or tenant in possession thereof shall submit to the master commercial owners association or other applicable association a report prepared by the owner or a qualified, independent third party that evaluates whether all major building systems such as heat furnace, air conditioner, and other mechanical fixtures are working within the design standards established for each system. The master commercial owners association or other applicable association shall monitor compliance and provide the County with an annual report of compliance with this measure.
5.21	**Climate Change**	**MM 21-8** Energy efficient major appliances and HVAC systems that meet the more stringent of applicable California Energy Commission (CEC) requirements or ENERGY STAR requirements, or equivalent, shall be ~~exclusively~~ offered by residential builders. Major appliances subject to this requirement include dishwashers, clothes washers, refrigerators, and room air conditioners.
5.21	**Climate Change**	**MM 21-9** The Project Applicant/Developer shall provide plans and specifications to the County that have been prepared in accordance with the Project Water Purveyor or alternate qualified public utility district requirements and standards, demonstrating that the Project's wastewater reclamation facilities (WRFs) shall include equipment to capture and reuse biogas for energy production.
5.21	**Climate Change**	***The following edit was identified subsequent to publication of the Final EIR in May 2018 and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors.*** **MM 21-9** The Project Applicant/Developer shall provide plans and specifications to the County that have been prepared in accordance with the Project Water Purveyor or alternate qualified public utility district requirements and standards, demonstrating that the Project's wastewater reclamation facilities (WRFs) shall ~~include equipment to~~ capture and reuse biogas for energy production.
5.21	**Climate Change**	**MM 21-10** The Project Applicant/Developer shall provide plans and specifications to the County demonstrating that nonresidential or multi-family buildings shall be constructed with recycled water infrastructure to serve common areas for these facilities, except where prohibited by law. To the extent recycled water is produced within the Project and available, recycled water shall be used for landscape irrigation within those common areas. Compliance with these measures shall be established prior to the of a construction permits for nonresidential and multi-family facilities and at the time of County approval of final landscaping plans submitted by the Project Applicant/Developer after final map recordation for homeowners association common areas. Covenants, conditions and restrictions (CC&Rs) shall require the owners of such common areas to maintain, repair and replace irrigation systems and plantings in accordance with County approved plans.

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#	Environmental Factor	Mitigation
5.21	**Climate Change**	**MM 21-11** The Project Applicant/Developer shall provide plans and specifications to the County demonstrating that nonresidential building shall be constructed with indoor plumbing fixtures and fixture fittings that would reduce the overall use of potable water within the building by 12 percent, consistent with 2016 CALGreen Tier 1 nonresidential voluntary measures as prescribed in Section A5.303.2.3.1 of the code.
5.21	**Climate Change**	**MM 21-12** The Project Applicant/Developer shall provide plans and specifications to the County demonstrating that single or multi-family residential buildings shall be constructed with kitchen faucets and appliances that comply with 2016 CALGreen code residential voluntary measures specified in Sections A4.303.1 and A4.303.3 of the code.
5.21	**Climate Change**	**MM 21-13** The outdoor residential (single-family and multi-family) water budget for water budget based ratemaking shall be based on having no more than 25 percent turf grass allowed in landscaped areas of single-family detached residential front yards and multi-family residential common areas.
5.21	**Climate Change**	**MM 21-14** Ten percent of all homes in Centennial communities that permit housing, with the exception of the lowest density area (Community 8-2) will be affordable, in conformance with the Affordable Housing Implementation Plan (see Appendix 3-H of the Centennial Specific Plan).
5.21	**Climate Change**	***The following edit was identified subsequent to publication of the Final EIR in May 2018 and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors.*** **MM 21-14** Ten percent of all homes in Centennial communities that permit housing, with the exception of the lowest density area (Community 8-2) will be affordable, in conformance with the Affordable Housing Implementation Plan (see Appendix 3-H of the Centennial Specific Plan).* **Note:* Independent of this measure, the Project Applicant/Developer has voluntarily agreed to a higher affordability percentage than imposed by this measure as part of the Development Agreement. *See* Item 11 (entitled "Affordable Home Ownership and Rental Housing Program") in Exhibit G of the Development Agreement.
5.21	**Climate Change**	**MM 21-15** The Project Applicant/Developer shall provide plans and specifications to the County demonstrating that one 208/240 VAC receptacle that may be used for charging electric vehicles, shall be installed in each detached and attached single-family residence in a manner consistent with 2016 CALGreen Code Voluntary Tier 1 Section A4.106.4.1. The installation shall comply with requirements of the 2016 CALGreen Code Section 4.106.4.1, or the most applicable code at the time of construction.
5.21	**Climate Change**	***The following further edit was identified subsequent to publication of the Final EIR in May 2018 and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors.*** **MM 21-15** The Project Applicant/Developer shall provide plans and specifications to the County demonstrating that one 208/240 VAC receptacle that may be used for charging electric vehicles, shall be installed in each detached and attached single-family residence in a manner consistent with 2016 CALGreen Code Voluntary Tier 1 Section A4.106.4.1. The installation shall comply with requirements of the 2016 CALGreen Code Section 4.106.4.1, or the

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#	Environmental Factor	Mitigation
		most applicable code at the time of construction. The Project Applicant/Developer shall provide a further credit of $500 to 50 percent of future homeowners (as requested by homeowner) to pay for the type of charging device then in use for electric vehicles or, with County approval, to pay for other energy conservation uses. The availability of this EV incentive benefit shall be disclosed and promoted at the time of initial sale of single family homes and shall thereafter be promoted by the TMA on its website.
5.21	**Climate Change**	**MM 21-16** The Project Applicant/Developer shall provide plans and specifications to the County demonstrating that "alternative energy fueling stations" shall be installed as follows. An "alternative energy vehicle fueling station" is a 208/240 VAC electrical vehicle charging station or a station providing another new or improved technology (e.g. compressed natural gas (CNG) and hydrogen fuel cell) that provides refueling for vehicles that do not use fossil fuel. An electric charging station shall allow for simultaneous charging of two electric vehicles. • Business Park and Institutional land use designations shall provide a minimum of one alternative energy vehicle fueling station on site for the first 50,000 square feet of usable floor space and additional alternative energy vehicle fueling stations for each additional 50,000 square feet of usable floor space thereafter. • Multi-family residential buildings of at least seventeen ~~20~~ (17) residential units shall provide a minimum of one alternative energy vehicle fueling station for the first ~~twenty~~ seventeen (~~20~~ 17) residential units and an additional alternative energy vehicle fueling station for each additional ~~twenty~~ seventeen (~~20~~ 17) residential units thereafter. • The Town Center and each Village Center shall provide a minimum of one alternative energy vehicle charging station. • Designated Transit Hubs shall provide a minimum of one alternative energy vehicle charging station.
5.21	**Climate Change**	***The following further edit was identified subsequent to publication of the Final EIR in May 2018 and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors.*** **MM 21-16** The Project Applicant/Developer shall provide plans and specifications to the County demonstrating compliance with the Electric Vehicle Supply (EVS) charging station measures specified in MM 11-4. If and to the extent subsequently approved by the County, compliant with state laws, and resulting in no new significant impacts to the environment following County review and approval, EVS charging stations may be replaced by "alternative energy fueling stations" which may include other types of electric vehicle charging technology (e.g., operating at higher or lower voltages), or alternative vehicular fuel technology that results in zero or near zero (as defined by CARB) GHG emission such as hydrogen fuel cells, biofuels, or other qualifying fuel technologies. ~~that "alternative energy fueling stations" shall be installed as follows. An "alternative energy vehicle fueling station" is a 208/240 VAC electrical vehicle charging station or a station providing another new or improved technology (e.g. compressed natural gas (CNG) and hydrogen fuel cell) that provides refueling for vehicles that do not use fossil fuel.~~ An electric charging station shall allow for simultaneous charging of two electric vehicles.

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#	Environmental Factor	Mitigation
		• Business Park and Institutional land use designations shall provide a minimum of one alternative energy vehicle fueling station on site for the first 50,000 square feet of usable floor space and additional alternative energy vehicle fueling stations for each additional 50,000 square feet of usable floor space thereafter. • Multi-family residential buildings of at least seventeen (17) residential units shall provide a minimum of one alternative energy vehicle fueling station for the first seventeen (17) residential units and an additional alternative energy vehicle fueling station for each additional seventeen (17) residential units thereafter. • The Town Center and each Village Center shall provide a minimum of one alternative energy vehicle charging station. • Designated Transit Hubs shall provide a minimum of one alternative energy vehicle charging station.
5.21	**Climate Change**	**MM 21-17** The Project Applicant/Developer shall provide plans and specifications to the County demonstrating that the following features have been incorporated into the building designs for non-residential buildings: • Bicycle parking spaces at a rate of 5 percent of minimum required vehicle parking spaces for nonresidential land uses. • Preferential parking for low-emitting, fuel-efficient, and carpool/van vehicles shall be provided as specified in Section A5.106.5.1, Nonresidential Voluntary Measures, of the CALGreen Code.
5.21	**Climate Change**	**MM 21-18** The Project Applicant/Developer shall provide plans and specifications to the County demonstrating that the following features have been incorporated into the building designs or specifications for multi-family residential buildings: • Visitor parking shall include preferentially located parking spaces for alternative-fueled vehicles. • Bicycle parking shall be provided as specified in Section A4.106.9, Residential Voluntary Measures, of the CALGreen Code or as required by County Code Section 22.52.1225B, whichever is more stringent.
5.21	**Climate Change**	***The following edit was identified subsequent to publication of the Final EIR in May 2018 and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors.*** **MM 21-18** The Project Applicant/Developer shall provide plans and specifications to the County demonstrating that the following features have been incorporated into the building designs or specifications for multi-family residential buildings: • Visitor parking shall include preferentially located parking spaces for ~~alternative-fueled~~ electric vehicles. • Bicycle parking shall be provided as specified in Section A4.106.9, Residential Voluntary Measures, of the CALGreen Code or as required by County Code Section 22.52.1225B, whichever is more stringent.

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#	Environmental Factor	Mitigation
5.21	**Climate Change**	**MM 21-19** For parking structures and parking lots with 20 or more parking spaces that serve uses other than residential or nonresidential buildings (e.g., trailhead, park), and parking structures and parking lots that serve multifamily residential buildings with 17 or more multifamily units, the Project Applicant/Developer shall provide plans and specifications to the County demonstrating that the following features have been incorporated into the parking facility: • The parking facility shall include a minimum of five percent preferentially located parking spaces for alternative-fueled (electric, natural gas, or similar low-emitting technology) vehicles. • Five percent of ~~T~~the total number of parking spaces provided in the parking facility, but in no case less than one, shall be Electric Vehicle Parking Spaces (EV Spaces), as defined in CALGreen Code Section 202, capable of supporting future Electric Vehicle Supply Equipment (EVSE), as defined in CALGreen Code Section 202 ~~include at least one electric vehicle charging station. Electrical lines shall be designed and sized to add additional charging stations for up to three percent of the total parking spaces when a demand is demonstrated.~~ Calculations for the required number of EV Spaces shall be rounded up to the nearest whole number and ~~T~~the design and installation of each EV space shall be consistent with Section A4.106.8.2, Residential Voluntary Measures, and Section 4.106.4.2, of the CALGreen Code as follows: **Single charging space requirements**. When only a single EV Space is required, install a listed raceway capable of accommodating a dedicated branch circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall be securely fastened at the main service or subpanel and shall terminate in close proximity to the proposed location of the charging system into a listed cabinet, box or enclosure. **Multiple charging spaces required**. When multiple EV Spaces are required, plans shall include the location(s) and type of EVSE, raceway method(s), wiring schematics and electrical calculations to verify that the electrical system has sufficient capacity to charge simultaneously all the electrical vehicles at all designated EV Spaces at their full rated amperage. Plan design shall be based on Level 2 EVSE at its maximum operating ampacity. Only underground raceways and related underground equipment are required to be installed at the time of construction. • For residential parking facilities, bicycle parking shall be provided as specified in Section A4.106.9, Residential Voluntary Measures, of the CALGreen code or as required by County Code Section 22.52.1225B, whichever is more stringent.

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#	Environmental Factor	Mitigation
5.21	**Climate Change**	***The following further edit was identified subsequent to publication of the Final EIR in May 2018 and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors.*** **MM 21-19** For parking structures and parking lots with 20 or more parking spaces that serve uses other than residential or nonresidential buildings (e.g., trailhead, park), and parking structures and parking lots that serve multifamily residential buildings with 17 or more multifamily units, the Project Applicant/Developer shall provide plans and specifications to the County demonstrating that the following features have been incorporated into the parking facility: • The parking facility shall include a minimum of five percent preferentially located parking spaces for ~~alternative-fueled (~~electric~~, natural gas, or similar low-emitting technology)~~ vehicles. • Five percent of the total number of parking spaces provided in the parking facility, but in no case less than one, shall be Electric Vehicle Parking Spaces (EV Spaces), as defined in CALGreen Code Section 202, capable of supporting future Electric Vehicle Supply Equipment (EVSE), as defined in CALGreen Code Section 202 Calculations for the required number of EV Spaces shall be rounded up to the nearest whole number and the design and installation of each EV space shall be consistent with Section A4.106.8.2, Residential Voluntary Measures, and Section 4.106.4.2, of the CALGreen Code as follows: **Single charging space requirements**. When only a single EV Space is required, install a listed raceway capable of accommodating a dedicated branch circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall be securely fastened at the main service or subpanel and shall terminate in close proximity to the proposed location of the charging system into a listed cabinet, box or enclosure. **Multiple charging spaces required**. When multiple EV Spaces are required, plans shall include the location(s) and type of EVSE, raceway method(s), wiring schematics and electrical calculations to verify that the electrical system has sufficient capacity to charge simultaneously all the electrical vehicles at all designated EV Spaces at their full rated amperage. Plan design shall be based on Level 2 EVSE at its maximum operating ampacity. Only underground raceways and related underground equipment are required to be installed at the time of construction. For residential parking facilities, bicycle parking shall be provided as specified in Section A4.106.9, Residential Voluntary Measures, of the CALGreen code or as required by County Code Section 22.52.1225B, whichever is more stringent.

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#	Environmental Factor	Mitigation
5.21	**Climate Change**	**MM 21-20** The Project Applicant/Developer shall ensure that the implementation of the Green Development Program takes into account compliance with the following regulations. 1) Regulations that are quantified inputs into the CalEEMod analysis, resulting in GHG Reductions: a) Pavley Motor Vehicle Standards (AB 1493) b) Low Carbon Fuel Standard (California Code of Regulations, Title 17, Division 3, Chapter 1, Subchapter 10, Article 4, Subarticle 7, Section 95480 et seq.) c) Title 24 (part 6 [Energy Code] and part 11 [CALGreen Code]) of the California Code of Regulations d) Renewable Portfolio Standard (SB X1 2 and SB 350) e) Solid Waste Diversion (AB 341) f) Statewide reduction in potable urban water usage of 25 percent relative to water use in 2013 (Executive Order B-29-15) g) Model Water Efficient Landscape Ordinance (MWELO) (California Code of Regulations, Title 23, Division 2, Chapter 2.7) h) Los Angeles Tree Planting Ordinance (Los Angeles County Code, Title 22, Division 1, Chapter 22, Part 20, Sections 22.52.2100 et seq.) i) Los Angeles County Green Building Standards Code (Los Angeles County Code, Title 31, Chapter 1, Sections 100 et seq.) j) California Water Code (California Code of Regulations, Division 6, Part 2.10, Sections 10910–10915) k) Los Angeles County Community Climate Action Plan 2) Regulations that are not quantified inputs into the CalEEMod analysis, but should be considered for incorporation as appropriate: a) EPA and NHTSA GHG and CAFE standards for passenger cars, light-duty trucks, and medium-duty passenger vehicles (75 FR 25324–25728 and 77 FR 62624–63200) and for medium- and heavy-duty vehicles (76 FR 57106–57513) b) Cap-and-Trade Program for Electricity, Stationary Sources, and Fuels (California Code of Regulations, Title 17, Division 3, Chapter 1, Subchapter 10, Article 5, Section 95801 et seq.) c) Advanced Clean Cars Program (California Code of Regulations, Title 13, Division 3, Chapter 1, Articles 1, 2, 6 (parts); Chapter 2, Articles 1, 2.1, 2.3, 2.4 (parts); Chapter 4.4 (parts); Chapter 8 (parts). d) Under Inflated Vehicle Tires (California Code of Regulations, Title 17, Division 3, Chapter 1, Subchapter 10, Article 4, Subarticle 8, Section 95550 et seq.) e) Heavy-Duty Vehicle Greenhouse Gas Emission Reduction Regulation (California Code of Regulations, Title 17, Division 3, Chapter 1, Subchapter 10, Article 4, Subarticle 1, Section 95300 et seq.)

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#	Environmental Factor	Mitigation
		f) Management of High Global Warming Potential Refrigerants for Stationary Sources (California Code of Regulations, Title 17, Division 3, Chapter 1, Subchapter 10, Article 4, Subarticle 5.1, Section 95380 et seq.) g) Small Containers of Automotive Refrigerant (California Code of Regulations, Title 17, Division 3, Chapter 1, Subchapter 10, Article 4, Subarticle 5, Section 95360 et seq.) h) High-Global Warming Potential Greenhouse Gases in Consumer Products (California Code of Regulations, Title 17, Division 3, Chapter 1, Subchapter 8.5, Article 2) i) CALGreen Code as Adopted by the Building Standards Commission (California Code of Regulations, Title 24, Part 11 Emergency Building Standard DSA-SS EF-02/15) j) Natural Gas Cooking Stoves and Fireplaces (SCAQMD Rule 445)
5.21	**Climate Change**	***The following edit was identified subsequent to publication of the Final EIR in May 2018 and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors.*** **MM 21-20** The Project Applicant/Developer shall ensure that the implementation of the Green Development Program ~~takes into account compliance with the~~ that complies with all applicable legal requirements, including but not limited to the following regulations (as may be amended): 1) Regulations that are quantified inputs into the CalEEMod analysis, resulting in GHG Reductions: a) Pavley Motor Vehicle Standards (AB 1493) b) Low Carbon Fuel Standard (California Code of Regulations, Title 17, Division 3, Chapter 1, Subchapter 10, Article 4, Subarticle 7, Section 95480 et seq.) c) Title 24 (part 6 [Energy Code] and part 11 [CALGreen Code]) of the California Code of Regulations d) Renewable Portfolio Standard (SB X1 2 and SB 350) e) Solid Waste Diversion (AB 341) f) Statewide reduction in potable urban water usage of 25 percent relative to water use in 2013 (Executive Order B-29-15) g) Model Water Efficient Landscape Ordinance (MWELO) (California Code of Regulations, Title 23, Division 2, Chapter 2.7) h) Los Angeles Tree Planting Ordinance (Los Angeles County Code, Title 22, Division 1, Chapter 22, Part 20, Sections 22.52.2100 et seq.) i) Los Angeles County Green Building Standards Code (Los Angeles County Code, Title 31, Chapter 1, Sections 100 et seq.) j) California Water Code (California Code of Regulations, Division 6, Part 2.10, Sections 10910–10915)

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#	Environmental Factor	Mitigation
		k) Los Angeles County Community Climate Action Plan 2) Regulations that are not quantified inputs into the CalEEMod analysis, but should be considered for incorporation as appropriate: a) EPA and NHTSA GHG and CAFE standards for passenger cars, light-duty trucks, and medium-duty passenger vehicles (75 FR 25324–25728 and 77 FR 62624–63200) and for medium- and heavy-duty vehicles (76 FR 57106–57513) b) Cap-and-Trade Program for Electricity, Stationary Sources, and Fuels (California Code of Regulations, Title 17, Division 3, Chapter 1, Subchapter 10, Article 5, Section 95801 et seq.) c) Advanced Clean Cars Program (California Code of Regulations, Title 13, Division 3, Chapter 1, Articles 1, 2, 6 (parts); Chapter 2, Articles 1, 2.1, 2.3, 2.4 (parts); Chapter 4.4 (parts); Chapter 8 (parts). d) Under Inflated Vehicle Tires (California Code of Regulations, Title 17, Division 3, Chapter 1, Subchapter 10, Article 4, Subarticle 8, Section 95550 et seq.)
5.21	**Climate Change**	**MM 21-21** The Project Applicant/Developer shall require contractors to use locally available and recycled building materials, provided such materials meet all applicable Building Code and other requirements, and are readily available and comparably priced to assure that such materials do not increase the cost and decrease the affordability of housing or community infrastructure.
5.21	**Climate Change**	**MM 21-22** The Project parking lots shall be designed to reduce vehicle queuing and improve pedestrian safety. Parking lot access designs shall include self-enforcement features for reducing the speeds on driveways, such as speed bumps or curved driveways. The parking lots shall include clearly marked pedestrian pathways connecting building entrances to parking, sidewalk, and transit drop-off/pick-up locations.

Section 3 – Environmental Setting

The fourth and fifth sentences in the third paragraph on page 3-5 are hereby revised as follows:

> Approximately 4.2 ~~ten~~ percent of the Project site is within the Gorman Drainage Area and the Los Angeles RWQCB (Region 4). However, ~~90~~ 95.8 percent of the Project site is located within the jurisdiction of the Lahontan Regional Water Quality Control Board (Lahontan RWQCB), which has been designated "Region 6" by the SWRCB (see Exhibit 5.2-1, Regional Water Quality Control Board Boundaries).

Section 4 – Project Description

The second to last sentence of the second paragraph under Section 4.2, Project Location, on page 4-2 is hereby revised as follows:

> The Project site's eastern boundary is ~~290th~~ 285th Street West. The Project site extends for approximately seven miles between its western boundary (west of Quail Lake) and its eastern boundary ~~near 290th Street West~~.

The following text is hereby added after the first paragraph under the "Open Space (OS)" heading on page 4-24:

> CENTENNIAL OPEN SPACE DEFINITIONS
>
> Mitigation Preserve: The Mitigation Preserve encompasses 43,079 acres of land to be preserved and managed in perpetuity for biological resources values. The Preserve consists of an On-site Mitigation Preserve, comprised of approximately 3,866 acres within the Project boundaries, but outside of the development footprint, and an Off-site Mitigation Preserve made up of 39,213 acres within adjacent and nearby off-site lands. These mitigation lands provide sufficient land and biological resource values to implement mitigation strategies to fully mitigate for Project biological resource impacts.
>
> On-site Mitigation Preserve
>
> The On-site Mitigation Preserve is divided into two areas. The southern on-site mitigation area includes 968 acres located immediately south of the development footprint along south side of SR-138. The northern on-site mitigation area consists of 2,898 acres located to the north and west of the development footprint on the west side of the aqueduct. All of the lands within the on-site portion of the Mitigation Preserve are within Los Angeles County SEA No. 17.
>
> Uses within the On-site Mitigation Preserve shall be restricted to use and continued maintenance of existing ranch roads and trails for access as well as

hiking and biking for private inholding owners and permitted Ranch guests. Public access and recreational hunting shall be prohibited. Authorized motorized vehicles including but not limited to Tejon Ranch employees, utility maintenance vehicles, that have a Tejon Ranch permit and emergency vehicles shall be restricted to existing ranch roads and all recreational motorized vehicles shall be prohibited. No improvements beyond what is necessary to maintain roads, fences, etcetera, in their current state shall be allowed, with the exception of the placement of two new water towers discussed below. Only habitat enhancement, restoration and creation activities approved by the County and described in the Mitigation Preserve Management Plan shall be permitted. New impacts shall be limited to the placement of two water towers with disturbance impacts of no more than five acres each. Grazing shall be allowed to continue as directed by the Mitigation Preserve Management Plan strictly for resource management values.

Off-site Mitigation Preserve

The Off-site Mitigation Preserve is divided into seven areas. Area 1 consists of 6,417 acres located adjacent to and immediately east of the southeastern corner of the Project site. Area 2 consists of 2,556 acres located adjacent and contiguous to the northwestern portions of the Project site. Nearly all of the land within these two preserve areas also occurs within SEA No. 17. Area 3 consists of 4,183 acres; this mitigation area is located in Kern County, immediately north of the Project site. Area 4 consists of 7,319 acres located on the northern slope of the Antelope Valley, northeast of both Area 3 and the Project site. Area 5 consists of 643 acres and is a square-shaped parcel located in Kern County on the northern slope of the Antelope Valley, immediately east of Area 4 and northeast of the Project site. Area 6 consists of 2,429 acres and is located in Kern County on the northern slope of the Antelope Valley, farthest to the northeast of the Centennial Project site. Area 7 (two distinct portions) consists of a combined 15,668 acres located in Kern County on the northern slope of the Antelope Valley. The westernmost portion of Area 7 sits between Areas 3 and 4, while the easternmost portion occurs east of Area 4 and boarders Area 6 to the north. The combined off-site Mitigation Preserve area amounts to 39,213 acres of mitigation lands. Cumulatively, both on and off-site, the Mitigation Preserve encompasses 43,079 acres of Project mitigation lands. The majority of three of these areas, Areas 3, 4, and 5 are the subject of conservation easements, therefore, although available for mitigation including enhancement, restoration, and creation, are not available for mitigation acreage value as preservation.

Uses within the Off-site Mitigation Preserve shall be restricted to use and continued maintenance of existing ranch roads and trails for access as well as hiking and biking for private inholding owners and permitted Ranch guests. Public access shall be prohibited. Authorized motorized vehicles including but not limited to Tejon Ranch employees, utility maintenance vehicles, that have

a Tejon Ranch permit and emergency vehicles shall be restricted to existing ranch roads and all recreational motorized vehicles shall be prohibited. No improvements beyond what is necessary to maintain roads, fences, etcetera, in their current state shall be allowed, Recreational hunting shall be restricted to Ranch authorized individuals and within designated hunting areas only. Only habitat enhancement, restoration and creation activities approved by the County and described in the Mitigation Preserve Management Plan shall be permitted. Grazing shall be allowed to continue as directed by the Mitigation Preserve Management Plan strictly for resource management values.

Green Space

Disturbed Green Space consists of areas within the project boundary that are impacted and will need to be mitigated. Disturbed Green Space will be amenities for the Project and could include one or more of the following uses: golf course, equestrian, natural parks, trails, cultural monuments, water retention basins, open space uses, utilities, grading, crop production, grazing, special events, and mitigation activities. No Mitigation credit has been taken into account for the Project impacts from the Green Spaces. While Green Spaces could be impacted initially, the concept of these areas is to restore it for community amenities and visual aesthetics between neighborhoods of development.

Undisturbed Green Space consists of areas within the project boundary that are not impacted and require no mitigation. There is no project mitigation credit taken for preserving these areas. To preserve these areas and to make sure there is no future mitigation needed, the uses are restricted to the following: Continued maintenance of existing ranch roads and trails for access as well as hiking and biking for private inholding owners and permitted Ranch guests. Public access and recreational hunting shall be prohibited. Authorized motorized vehicles including but not limited to Tejon Ranch employees, utility maintenance vehicles, that have a Tejon Ranch permit and emergency vehicles shall be restricted to existing ranch roads and all recreational motorized vehicles shall be prohibited. Restricted access signage shall be posted along interface with public areas. Wildlife friendly fencing will be used to demarcate the edge of restricted access green space.

The following further edit was identified subsequent to publication of the Final EIR, and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors. No further edits have been made to this text. The following text is hereby revised added after the first paragraph under the "Open Space (OS)" heading on page 4-24:

CENTENNIAL OPEN SPACE DEFINITIONS

Mitigation Preserve: The Mitigation Preserve encompasses 43,079 acres of land to be preserved and managed in perpetuity for biological resources

values. The Preserve consists of an On-site Mitigation Preserve, comprised of approximately 3,866 acres within the Project boundaries, but outside of the development footprint, and an Off-site Mitigation Preserve made up of 39,213 acres within adjacent and nearby off-site lands. These mitigation lands provide sufficient land and biological resource values to implement mitigation strategies to fully mitigate for Project biological resource impacts.

On-site Mitigation Preserve

The On-site Mitigation Preserve is divided into two areas. The southern on-site mitigation area includes 968 acres located immediately south of the development footprint along south side of SR-138. The northern on-site mitigation area consists of 2,898 acres located to the north and west of the development footprint on the west side of the aqueduct. All of the lands within the on-site portion of the Mitigation Preserve are within Los Angeles County SEA No. 17.

Uses within the On-site Mitigation Preserve shall be restricted to use and continued maintenance of existing ranch roads and trails for access as well as hiking and biking for private inholding owners and permitted Ranch guests. Public access and recreational hunting shall be prohibited. Authorized motorized vehicles including but not limited to Tejon Ranch employees, utility maintenance vehicles, that have a Tejon Ranch permit and emergency vehicles shall be restricted to existing ranch roads and all recreational motorized vehicles shall be prohibited. No improvements beyond what is necessary to maintain roads, fences, etcetera, in their current state shall be allowed, with the exception of the placement of two new water towers discussed below. Only habitat enhancement, restoration and creation activities approved by the County and described in the ~~Mitigation Preserve~~ Ranch-wide Management Plan shall be permitted. New impacts shall be limited to the placement of two water towers with disturbance impacts of no more than five acres each. Grazing shall be allowed to continue as directed by the ~~Mitigation Preserve~~ Ranch-wide Management Plan strictly for resource management values.

Off-site Mitigation Preserve

The Off-site Mitigation Preserve is divided into seven areas. Area 1 consists of 6,417 acres located adjacent to and immediately east of the southeastern corner of the Project site. Area 2 consists of 2,556 acres located adjacent and contiguous to the northwestern portions of the Project site. Nearly all of the land within these two preserve areas also occurs within SEA No. 17. Area 3 consists of 4,183 acres; this mitigation area is located in Kern County, immediately north of the Project site. Area 4 consists of 7,319 acres located on the northern slope of the Antelope Valley, northeast of both Area 3 and the Project site. Area 5 consists of 643 acres and is a square-shaped parcel located in Kern County on the northern slope of the Antelope Valley, immediately east

of Area 4 and northeast of the Project site. Area 6 consists of 2,429 acres and is located in Kern County on the northern slope of the Antelope Valley, farthest to the northeast of the Centennial Project site. Area 7 (two distinct portions) consists of a combined 15,668 acres located in Kern County on the northern slope of the Antelope Valley. The westernmost portion of Area 7 sits between Areas 3 and 4, while the easternmost portion occurs east of Area 4 and boarders Area 6 to the north. The combined off-site Mitigation Preserve area amounts to 39,213 acres of mitigation lands. Cumulatively, both on and off-site, the Mitigation Preserve encompasses 43,079 acres of Project mitigation lands. The majority of three of these areas, Areas 3, 4, and 5 are the subject of conservation easements, therefore, although available for mitigation including enhancement, restoration, and creation, are not available for mitigation acreage value as preservation.

Uses within the Off-site Mitigation Preserve shall be restricted to use and continued maintenance of existing ranch roads and trails for access as well as hiking and biking for private inholding owners and permitted Ranch guests. Public access shall be prohibited. Authorized motorized vehicles including but not limited to Tejon Ranch employees, utility maintenance vehicles, that have a Tejon Ranch permit and emergency vehicles shall be restricted to existing ranch roads and all recreational motorized vehicles shall be prohibited. No improvements beyond what is necessary to maintain roads, fences, etcetera, in their current state shall be allowed, Recreational hunting shall be restricted to Ranch authorized individuals and within designated hunting areas only. Only habitat enhancement, restoration and creation activities approved by the County and described in the ~~Mitigation Preserve~~ Ranch-wide Management Plan shall be permitted. Grazing shall be allowed to continue as directed by the ~~Mitigation Preserve~~ Ranch-wide Management Plan strictly for resource management values.

Green Space

Disturbed Green Space consists of areas within the project boundary that are impacted and will need to be mitigated. Disturbed Green Space will be amenities for the Project and could include one or more of the following uses: golf course, equestrian, natural parks, trails, cultural monuments, water retention basins, open space uses, utilities, grading, crop production, grazing, special events, and mitigation activities. No Mitigation credit has been taken into account for the Project impacts from the Green Spaces. While Green Spaces could be impacted initially, the concept of these areas is to restore it for community amenities and visual aesthetics between neighborhoods of development.

Undisturbed Green Space consists of areas within the project boundary that are not impacted and require no mitigation. There is no project mitigation credit taken for preserving these areas. To preserve these areas and to make

sure there is no future mitigation needed, the uses are restricted to the following: Continued maintenance of existing ranch roads and trails for access as well as hiking and biking for private inholding owners and permitted Ranch guests. Public access and recreational hunting shall be prohibited. Authorized motorized vehicles including but not limited to Tejon Ranch employees, utility maintenance vehicles, that have a Tejon Ranch permit and emergency vehicles shall be restricted to existing ranch roads and all recreational motorized vehicles shall be prohibited. Restricted access signage shall be posted along interface with public areas. Wildlife friendly fencing will be used to demarcate the edge of restricted access green space.

The third full paragraph on page 4-41 is hereby revised as follows:

The draft NW SR-138 EIR/EIS, TAR and ICE Report ~~do~~ did not identify a preferred alternative and Caltrans deferred the selection of a preferred alternative to the Final EIR/EIS. In June 2017 the Final EIR/EIS identified Alternative 2 (Expressway/Highway) as the preferred alternative. Alternative 2 includes a 6-lane freeway from the I-5 interchange to Gorman Post Road, a 6-lane Expressway from Gorman Post Road to 300th Street West, a 4-lane expressway from 300th Street West to 240th Street West, and a 4-lane limited access conventional highway from 240th Street West to the SR-14 interchange, generally following the existing alignment of SR-138. Caltrans has also reserved the right to determine the specific preferred intersection control based on the traffic and safety data at the time the improvements occur. Thus, depending on the timing of the implementation of the realigned SR-138; and the timing of the implementation of the Project; the ultimate connection requirements for Project roads to SR-138 may need additional future design analysis in conjunction with future phases of development. All construction activities within Caltrans right-of-way would be closely coordinated with Caltrans, subject to their review and design standards, and subject to their approval. A Supplemental Traffic Study (STS) has been prepared to incorporate the preferred Alternative 2 for SR-138 into the Project analysis. The STS is attached as Appendix 5.10-C of this Final EIR. The STS evaluates potential impacts using the Highway Capacity Manual (HCM) methodology and the North County Sub-Area Model utilized in the NW SR-138 Final EIR/EIS as updated by Los Angeles County to reflect the Antelope Valley Area Plan approved by the County in June 2015. The STS determined that the implementation of Alternative 2, and additional improvements to SR-138 that may be required under cumulative conditions with full Project buildout, will not result in any new or more severe significant physical construction and operational impacts than considered in the NW SR-138 Final EIR/EIS and the Project Draft EIR. The STS also demonstrates that, using the HCM methodology, the Project will not result in any new or more severe significant impacts to applicable highway segments, intersections and ramps than considered in the Project Draft EIR.

The second sentence of the last paragraph on page 4-43 is hereby revised as follows:

> As a result of this effort, all ~~3,861~~ 3,866 acres of the County of Los Angeles' San Andreas Significant Ecological Area (SEA 17) that fall within the Project site boundaries are avoided.

The first three paragraphs on page 4-44 are hereby revised as follows:

> The Project requires that some drainage corridors be modified to incorporate necessary flood-control or water quality features; whenever possible, these modifications will incorporate "naturalized features" to blend the improvements into the natural appearance of unmodified areas. In addition, implementation of the Project would avoid or minimally impact riparian resources along sensitive drainages. Of the 12,323 acres within the Project site, approximately 5,624 acres would be included in the Open Space land use designation. Of the 5,624 acres of designated Open Space, approximately 5,116 acres (42 percent of the total Project site) are intended to (1) remain in their original natural condition; (2) be restored; and/or (3) be enhanced by weed abatement, fencing, and native species planting, among other means. Of this amount, approximately ~~3,861~~ 3,866 acres are designated as SEA 17 to be preserved in perpetuity within the Project site boundaries.
>
> Additionally, approximately ~~23,547~~ 39,213 acres of off-site areas would be set aside for preservation to mitigate impacts to biological resources, as discussed further in Section 4.7, Off-Site Project Features and depicted in Exhibit 4-12, Centennial Project – Off-Site Mitigation Preserve. The Developer would provide a conservation easement for both the ~~3,861~~ 3,866 on-site preserved acres and the ~~23,547~~ 39,213 off-site preserved acres to ensure preservation of the total ~~27,412~~ 43,079-acre ~~open space~~ Mitigation P~~p~~reserve in perpetuity. Importantly, contained within this ~~23,547~~ 39,213 acres of off-site preservation are approximately ~~8,935~~ 8,913 acres of SEA 17 lands, which contain high-value biological resources.
>
> Therefore, when considering the amount of preserved on-site and off-site lands (i.e. ~~27,412~~ 43,079 acres) compared to the total disturbed/developed areas within the Project site boundaries based on the Grading Plan (i.e., 7,751 acres), almost ~~3.5~~ 5.6 times as much land would be preserved as would be developed.

The "Grassland Mitigation Plan" section on page 4-44 is hereby revised as follows:

> **Grassland Mitigation (Ranch-wide Management Plan)**
>
> The lands designated as Open Space (OS) on-site are generally divided into two large areas: the northwest portion of the Project site and the southeastern portion of the site. The area in the northwestern part of the site is comprised primarily of Oso Canyon, which includes a blueline stream and

foothills/canyons with slopes of 25 percent or greater. The southeastern portion of the site contains similar vegetation and associated biological resources.

Grazing would occur within the OS designation. Grazing operations would be directed under the provisions of the ~~Grassland Mitigation Plan, which is a component of the Mitigation Preserve Management Plan and/or~~ the Ranch-~~W~~wide Management Plan (RWMP) (~~which is being prepared by the Tejon Ranch Conservancy~~); grazing would include temporary and long-term activities, possibly in perpetuity if determined necessary to maintain grassland values based on the ~~Grassland Mitigation Plan~~ RWMP (refer to Mitigation Measure [MM] 7-10 in Section 5.7, Biological Resources). The ~~Grassland Mitigation Plan~~ RWMP would preserve and manage existing native grasslands to ensure their sustainment in perpetuity. The Plan is intended to be a dynamic program that allows for incorporation of new restoration and enhancement treatments over time to determine the optimum methods of treatment for management and restoration of native grassland communities.

The last three sentences of the first paragraph under "Other Relevant Plans" on page 4-45 are hereby revised as follows:

Additionally, the Project ~~Open Space~~ Mitigation Preserve includes areas of off-site preservation lands within Tejon Ranch lands. Areas 1 and 2 are located within Los Angeles County and include a total of 8,973 acres, as depicted in Exhibit 4-12, Centennial Project – Off-Site Mitigation Preserve. In total, the Off-site Mitigation Preserve includes ~~23,547~~ 39,213 acres of off-site property that will be used to mitigate for Project-related biological impacts.

The last sentence of the text under "Project Open Space Areas" on page 4-45 is hereby revised as follows:

Of the 12,323 acres within the Project site, approximately 5,624 acres would be included in the Open Space land use designation, and approximately ~~3,861~~ 3,866 of the open space acres are designated as SEA 17 to be preserved in perpetuity within the Project site boundaries.

The first and second sentences in the third paragraph on page 4-54 are hereby revised as follows:

Approximately ~~93~~ 95.8 percent of the Project site is within the jurisdiction of the Lahontan Regional Water Quality Control Board (Lahontan RWQCB); this area is not covered by an MS4 Permit due to the lack of development in the area. The remaining approximately ~~7~~ 4.2 percent of the Project site is within the jurisdiction of the Los Angeles Regional Water Quality Control Board (Los Angeles RWQCB); an MS4 permit has been approved by the Los Angeles RWQCB and is applicable to the portion of the site under the Los Angeles RWQCB's jurisdiction.

The text on page 4-55 is hereby revised as follows:

> The Project includes a domestic (potable) water supply system, including water treatment, storage and distribution systems (collectively, "Potable Water System"). The design, construction, and operation of the Potable Water System would be required to comply with standards set by the California Division of Drinking Water (DDW) and Los Angeles County Department of Public Works. The project site is currently not within the boundaries of a retail water purveyor. As noted above, Centennial Founders, LLC has requested the GVMWD Board of Directors to consider annexing the Project area and operating the Project's proposed potable water, water recycling, and wastewater facilities. If approved by the County, e~~E~~ither the GVMWD or a PUD will provide service to the Project.
>
> After completion of the proposed annexation, the Project's water and wastewater systems would be owned and operated by the PUD, including the wastewater collection, treatment, and recycled water systems. Additionally, annexation of the Project area could allow PUD to own and maintain facilities and structures used to address flood control, drainage, and water quality issues. Annexation of the Project into the PUD service area would require approval by the Los Angeles County Local Agency Formation Commission (LAFCO) and would occur after the certification of this EIR.
>
> If the PUD does not annex the Project site, a Community Services District (CSD), or other agency approved by the County (the Maintenance Entity) and agreed to by the Project Applicant/Developer will be established, that will own, operate, and maintain the water, sewer, recycled water and storm drain facilities (including the water quality treatment and hydromodification control facilities) on the Project site. The Maintenance Entity will be funded through a rate-payer system imposing fees on the Project properties/service customers.
>
> Whether the potable water, recycled water, water quality, sewer, sewer treatment plant, and flood control systems and services are owned and/or provided by GVMWD, a PUD, a CSD, the County or a combination of the aforementioned, the Los Angeles County Department of Public Works must approve each arrangement prior to approval of the tentative map to ensure that the systems and services provided to the public are setup in a manner that is sustainable and financially viable over time.

The fourth full paragraph on page 4-59 is hereby revised as follows:

> Construction of WRF East would occur first and would be operational upon site occupancy. The facility would be expanded in phases, as required to treat the wastewater flows generated by occupied land uses. WRF East, intended to serve the wastewater treatment and wastewater reclamation (i.e., production of recycled water) needs for the initial phase of development on the Project

site east of the Aqueduct and would have ~~a design capacity~~ an average daily flow of approximately 4.28 mgd. This facility is proposed for development on a site near the northeastern corner of the Project site, just west of 300th Street West, as shown on Exhibit 4-14.

The second full paragraph on page 4-60 is hereby revised as follows:

WRF West would serve the subsequent phase of Project development located to the west of the Aqueduct; it would have an approximate ~~capacity~~ average daily flow of 0.34 mgd and is proposed to be located on an approximate 3.0-acre site, also shown on Exhibit 4-14. Recycled water from WRF West would be pumped directly to the Zone C recycled water tank located nearby, west of the Aqueduct. WRF West would be constructed of concrete and steel materials that would generally be at or below grade, with a few structures (e.g., administrative/lab facilities, secondary treatment digesters, sludge centrifuges, and filtration facilities) having maximum heights of approximately 30 to 40 feet. Security fencing and night lighting would be provided along the perimeter of the WRF West site.

The last sentence of the last full paragraph on page 4-64 is hereby revised as follows:

The Centennial Substation would be located in the vicinity west of 300th ~~to 310th~~ Street West ~~either north or south~~ within Village 6, north of SR-138, as described further below (refer to Exhibit 4-21).

The third and fourth sentences of the last partial paragraph on page 4-64 are hereby revised as follows:

The Centennial Substation would be located in the ~~in the~~ vicinity west of 300th ~~to 310th~~ Street West ~~either north or south~~ within Village 6, north of SR-138. The Centennial Substation would be an unmanned, 66/12~~/6.9~~ kV, 28 Mega Volt Ampere (MVA), Substation Automated Station (SAS) Automated Station.

The second full paragraph on page 4-65 is hereby revised as follows:

The existing 66 kV lines (overhead or underground) along SR-138 would be extended to the proposed Centennial Substation site. This substation would convert the incoming 66 kV to outgoing 12 kV~~/6.9 kV~~, which would then be distributed to the Project site. The extension of the 66 kV facilities would either be in or out of the proposed roadways. SCE would require easements or joint-use easements for these facilities. The 12 kV~~/6.9 kV~~ distribution facilities would be extended underground within the roadways. Transmission and distribution lines over the rest of the Centennial site are discussed below.

The last paragraph on page 4-65 is hereby revised as follows:

> The existing 66-kV lines (overhead or underground) along SR-138 would be extended to the proposed Centennial Substation site. This substation would convert the incoming 66 kV to outgoing 12 kV~~/6.9 kV~~, which would then be distributed to the Project site. The extension of the 66-kV facilities would either be in or out of the proposed roadways. SCE would require easements or joint-use easements for these facilities. The 12-kV~~/6.9 kV~~ distribution facilities would be extended underground within the roadways. Transmission and distribution lines over the rest of the Centennial site are discussed below.

The second to last sentence of the second full paragraph on page 4-67 is hereby revised as follows:

> The Centennial Substation discussed above would be required in the area west of 300th ~~to 310th~~ Street West ~~along~~ within Village 6, north of SR-138.

The second sentence under "Material Conservation and Efficiency" on page 4-73 is hereby revised as follows:

> For example, The Project is required to divert 100 percent of soil during grading activities, and at least ~~70~~ 75 percent of non-hazardous construction and demolition waste, away from landfills to recycling or salvage or current County standards.

The third sentence of the second full paragraph on page 4-76 is hereby revised as follows, per the Developer Fee Detailed Fire Station Plan[3417]:

> A large station consists of an approximate ~~15,500~~ 13,000-sf building on an approximately 4.00-acre lot.

The first sentence of the first paragraph under "Fire Protection and Law Enforcement Services" on page 4-93 is hereby revised as follows:

> Fire services and emergency response for fire incidents during the initial development phases of the Project would be provided from Fire Station 77, located at 46833 Peace Valley Road in Gorman, which is currently staffed with a three-person assessment engine company, which is an engine company with some limited paramedic capabilities.

[3417] County of Los Angeles Fire Department (LACFD). 2017 (September). Fiscal Year-End Report and Updated Developer Fee Detailed Fire Station Plan for the Consolidated Fire Protection District of Los Angeles County (3rd and 5th Districts) (3 Votes), *Attachment A*. Los Angeles, CA: the County. http://file.lacounty.gov/SDSInter/bos/supdocs/117857.pdf.

The last two sentences of the first paragraph under Section 4.7.4, Mitigation Areas, on page 4-101 are hereby revised as follows:

> Of this amount, approximately ~~3,861~~ 3,866 acres are designated as SEA 17 to be preserved in perpetuity within the Project site boundaries. A study of adjacent lands identified ~~6~~ 7 areas which, when combined with the approximately 5,116 acres of on-site open space mitigation areas, would provide sufficient land and biological resources to implement mitigation strategies to fully mitigate Project impacts related to biological resources.

The first sentence of the first paragraph under Section 4.7.4, Mitigation Areas, on page 4-101 is hereby revised as follows:

> Areas 1 and 2 are located in Los Angeles County, and Areas 3~~–6~~ through 7 are located in Kern County, northeast of the Project area.

The first three full paragraphs on page 4-102 are hereby revised as follows:

> In Kern County, Area 3 consists of 4,183 acres and Area 4 consists of 7,319 acres. Area 5 consists of 643 acres and is a square-shaped parcel, immediately east of Area 4 and northeast of the Project site. Area 6 consists of 2,429 acres and is located on the northern slope of the Antelope Valley, farthest to the northeast of the Centennial Project site. Area 7 consists of 15,668 acres and is split into two portions, where the first portion is located between Areas 3 and 4, and the second portion between Areas 4 and 6 as well as immediately north and adjacent to Area 6.
>
> The combined off-site ~~open space~~ Mitigation P~~p~~reserve area amounts to approximately ~~23,547~~ 39,213 acres of mitigation lands. As previously discussed in Section 4.5.7, these six areas would be preserved in perpetuity to allow for preservation and implementation of mitigation strategies.
>
> The Natural Resources/Open Space Management Plan includes both on-site and off-site mitigation areas. Approximately 5,116 acres of open space is available for use as on-site mitigation and off-site mitigation areas total ~~23,547~~ 39,213 acres, for a combined total of ~~28,663~~ 44,329 acres of preserved open space resulting from Project implementation.

The first three full paragraphs on page 4-102 are hereby revised as follows:

> While it is anticipated that Appendix 1-D will be adopted by ordinance at this time, the County may decide to adopt Appendix 1-D by resolution at the time of Project approval. ~~Appendix~~ Appendices 1-B, ~~*Green Development Program*, and Appendix~~ 2-A, and 2-B, would be adopted by Resolution.

The following text is hereby inserted on page 4-104:

- ***Development Agreement.*** A Development Agreement (DA) is also anticipated to be sought as part of the initial project entitlements. Under state law, a DA is a voluntary agreement, adopted by ordinance, between the County and the project proponent. The purpose of a DA is to provide both the County and the developer with long-term contractual assurances that the project includes public benefits and can be built out as approved.

  While the final text of the DA can only be approved in the form of an ordinance by the Board of Supervisors. the County and the Applicant have identified a list of community benefits to be included in the DA as applicant obligations. These community benefits include (among other obligations) requirements to provide land within the Centennial project site at no cost to the County for the development and operation of a County municipal services building, a County consolidated maintenance yard, a material recovery facility and a County animal care facility. The community benefits also include the applicant's agreement to payment of funds for the construction of these facilities.

  The DA does not include any applicant obligations or County activities that would cause any physical changes to the environment that fall outside the boundaries of the area designated for future development within the Centennial project site. The DA likewise does not include any type of facility or land use that falls outside the scope of land uses that were identified in the Specific Plan and analyzed in the accompanying project EIR. Accordingly, implementation of the DA will not result in any significant new impacts to the environment, or worsen any previously-identified significant environmental impact, in relation to impacts already considered in the Draft EIR. The proposed DA does not require recirculation or supplemental environmental analyses under CEQA.

The text under "Ministerial Actions" and "Discretionary Actions" on pages 4-105 through 4-107 is hereby revised:

Ministerial Actions

The following actions are ministerial as they involve only (1) a determination that the proposed action conforms to the *Centennial Specific Plan;* (2) a determination of consistency with an approved Tentative Map, Final Map, Conditional Use Permit, or other approval issued pursuant to the *Centennial Specific Plan;* or (3) a determination that an application meets the standards required for that particular type of application as in Chapter 4 of the *Centennial Specific Plan* or the County Code. As stated above, each type of approval is followed by the corresponding *Centennial Specific Plan* section reference.

- Interpretations (Section ~~4.5.1.1.1~~ 4.5.1.1);

- Development standard equivalency (Section ~~4.5.1.1.2~~ 4.5.1.2);
- *Centennial Specific Plan* text and figure changes (Section ~~4.5.1.1.3~~ 4.5.1.3);
- ~~Affordable housing consistency (Section 4.5.1.1.4);~~
- ~~Residential signage consistency (Section 4.5.1.1.5);~~
- ~~Non-residential signage consistency (Section 4.5.1.1.6);~~
- Deviations from development standards (Section ~~4.5.2.1.1~~ 4.5.1.4);
- Exhibit map change that does not require a tentative map modification (Section ~~4.5.2.1.2~~ 4.5.1.5);
- Changes in the order or configuration of phasing on an approved tentative map (Section ~~4.5.2.1.3~~ 4.5.1.6);
- Minor ~~T~~ttransfers within ~~V~~villages (Section ~~4.5.2.1.4~~ 4.5.1.7);
- ~~Transfers of Park Use and Greenways (Section 4.5.2.1.5)~~
- ~~Land Use Equivalency Determination (Section 4.5.2.1.6)~~
- ~~Conceptual Land Use Plan and Development Standards (Section 4.5.4.1)~~
- ~~Existing uses (Section 4.5.5.1);~~
- ~~Ministerial interim use permit (Section 4.5.5.2.1).~~
- Use approvals (Section 4.5.1.8);
- Modifications to signs and sign programs (Section 4.5.1.9);
- Conversions (Section 4.5.1.10);
- Off-site haul routes (Section 4.5.1.11);
- Procedure (Section 4.5.1.12).

Discretionary Actions

The following actions require the exercise of discretion by the County or may propose a scope of development that has not been reviewed as part of the Centennial Specific Plan EIR. Future CEQA review of these discretionary actions shall be processed in accordance with CEQA, including Section 21166 of the *California Public Resources Code* and Sections 15162 and 15164 of the CEQA Guidelines (14 CCR). If the County determines that an additional CEQA document must be prepared in connection with such discretionary approval, future environmental analysis should tier from this EIR whenever feasible pursuant to Section 21093 of the *California Public Resources Code.* Each type of approval is followed by the corresponding *Centennial Specific Plan* section reference.

~~1) Land Uses Requiring "Substantial Conformance Review" (Section 4.5.3.1.1).~~

~~2) Conditional use permit modifications (Section 4.5.3.1.2).~~

3) Major ~~T~~transfers within ~~V~~villages (Section ~~4.5.3.1.3~~ 4.5.2.1).

~~4) Transfers of residential units and non-residential building square footage from Village to Village (Sections 4.5.3.1.4 and 4.5.3.1.5).~~

~~5) Conversions (Sections 4.5.3.1.6).~~

~~6) Off-site haul routes (Section 4.5.3.1.7).~~

~~7) Sign and sign programs (Section 4.5.3.1.8).~~

~~8) Parcel maps and minor land divisions (Section 4.5.4.2).~~

~~9) Tentative maps (Section 4.5.4).~~

~~10)Amended tentative maps (Section 4.5.4.3).~~

~~11)Revised tentative maps (Section 4.5.4.4).~~

~~12)Initial approval of exhibit maps (Section 4.5.4.5).~~

~~13)Discretionary interim use permit (Section 4.5.5.2.2).~~

~~14)Temporary use permit (Section 4.5.5.3).~~

15)Procedures (Section 4.5.2.2).

16)Conditional use permits (Section ~~4.5.5.4~~ 4.5.-4).

~~17)Land use/planning area boundary adjustments (Section 4.6.1).~~

~~18)Specific Plan amendment (Specific Plan Section 4.9).~~

~~19)Roadway realignments (Specific Plan Section 4.6.1).~~

Section 5.2 – Hydrology and Flood

The following edit was identified subsequent to publication of the Final EIR and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors. No further edits have been made to this text. MM 2-2, which starts on page 5.2-49 of the Draft EIR, is hereby revised as follows:

MM 2-2 The Project shall implement hydrology and flood-control BMPs that will achieve the following hydrology and flood performance standards:

All project water conveyance facilities must be designed to provide capital flood protection. The "capital flood" is the runoff produced by a 50-year frequency design storm falling on a saturated watershed (i.e. soil moisture at field capacity). A 50-year frequency design storm has a probability of 1/50 of being equaled or exceeded in any year. BMPs must be implemented to ensure that, for the capital storm event, there is no increase in peak discharge rates and no increase in runoff volume offsite

compared with peak discharge rates and runoff volumes under existing, pre-development conditions. Compliance with the hydrology and flood performance standard shall be demonstrated by using a methodology approved Los Angeles County Department of Public Works for comparing project site pre- and post-development peak discharge rates and runoff volumes.

Compliance with the hydrology and flood performance standards shall be further confirmed by the County, based on a Drainage System Engineering and Planning Report submitted with each Project tract map application. The Drainage System Engineering and Planning Report shall describe applicable hydrology and flood-control BMPs and utilize approved Los Angeles County methodologies to demonstrate compliance with the hydrology and flood performance standards.

MMs 2-4 and 2-5 are hereby added after MM 2-3 on page 5.2-50 as follows:

MM 2-4 The Project shall comply with the California General Construction Permit issued by the State Water Resources Control Board (CAR000002, Order 2009-0009-DWQ as amended by Order 2010-0014-DWQ and Order 2012-0006-DWQ) during all Project construction activity that meets or exceeds the applicable levels of land disturbance and other applicable coverage criteria in the California General Construction Permit notwithstanding the potential absence or presence of Waters of the United States in any Project construction location.

MM 2-5 The Project shall implement maintenance measures in consultation with a qualified biologist that encourage stabilized native grasses and/or deep rooting plants to minimize sediment transport within applicable post-construction facilities that incorporated Best Management Practices for hydrology and flood control facilities.

Section 5.3 – Hazards and Fire Safety

The third sentence of the third paragraph on page 5.3-9 is hereby revised as follows:

Quarterly Groundwater Monitoring Reports are prepared for the Lahontan RWQCB (copies of which are available ~~with the County of Los Angeles Department of Regional Planning~~ on the GeoTracker website[2]) to demonstrate containment of the plume and to track the success level in remediating the contaminants of concern (primarily halogenated volatile organic compounds [HVOCs]).

Additionally, a footnote is hereby added on page 5.3-9 as follows:

> [2] State Water Resources Control Board (SWRCB). 2017 (October, accessed). GeoTracker: Lebec Cement Plant – National Cement (Maintenance Shop) (SL206063824) (Site Maps / Documents; Monitoring Reports). Sacramento, CA: SWRCB. http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=SL206063824.

The following sentences located at the bottom of page 5.3-11 and the top of page 5.3-12, and the related footnotes on page 5.3-12, are hereby revised as follows:

> The two samples collected at a depth of six inches bgs were analyzed for total petroleum hydrocarbons, carbonchain (TPH-cc), and Title 22 metals;~~[2]~~ [3] the two samples collected at two feet bgs were analyzed for VOCs. In addition, all soil samples collected were field-screened for VOCs using a photoionization detector (PID).~~[3]~~ [4]
>
> ~~[2]~~ [3] Refers to the 16 metals listed in Title 22 of the *California Code of Regulations* ("Title 22 metals").
>
> ~~[3]~~ [4] A photoionization detector is a portable vapor and gas detector that detects a variety of organic compounds.

The first sentence of the second paragraph under "Environmental Setting" on page 5.3-33 is hereby revised as follows:

> The western and southeastern edges and eastern p~~P~~ortions of the Project site are designated as a VHFHSZ and the western and central portions are designated as a HFHSV, with the eastern edge designated as Moderate Fire Hazard Severity Zone (see Exhibit 5.3-2, Fire Hazard Severity Zones).

The second sentence of the first paragraph under "On-Site Impacts" on page 5.3-35 is hereby revised as follows:

> The majority of the Project area is within a VHFHSV and an HFHSV, which are subject to high fire hazards due to the presence of high brush, woodlands, and steep slopes. Areas within the Moderate Fire Hazard Severity Zone include the eastern edge of the Project site and areas farther east.

The following edit was identified in the Final EIR published May 2018. No further edits have been made to this text. An additional bullet is hereby added before the first bullet of MM 3-2 on page 5.3-26 of the Draft EIR as follows:

MM 3-2 To aid in the prevention of Valley Fever among construction crews on the Project site, the following measures shall be implemented by the Construction Contractor during all construction activities:

- Have Tyvek™ coveralls/suits available in a range of sizes for construction worker use upon request. If used, require the worker to remove the Tyvek™ suit at the work site at the end of the day.
- Hire crews from Los Angeles and/or Kern County populations, or other areas where Valley Fever is endemic, where possible, since it is more likely that they have been previously exposed to the fungus and are therefore immune.

The following further edit was identified subsequent to publication of the Final EIR and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors. No further edits have been made to this text. MM 3-2, which starts on page 5.3-26 of the Draft EIR, is hereby revised as follows:

MM 3-2 To aid in the prevention of Valley Fever among construction crews on the Project site, the following shall be implemented by the Construction Contractor during all construction activities:

- Have Tyvek™ coveralls/suits available in a range of sizes for construction worker use upon request. If used, require the worker to remove the Tyvek™ suit at the work site at the end of the day.
- Hire crews from Los Angeles and/or Kern County populations, or other areas where Valley Fever is endemic, where possible, since it is more likely that they have been previously exposed to the fungus and are therefore immune.
- Prior to Project construction initiation, and for any personnel additions after initial Project construction initiation, the following California Department of Public Health (CDPH) materials on Valley Fever (or the most updated materials applicable to Los Angeles County) shall be distributed to worksite supervisors:
    - CDPH pamphlet entitled "Preventing Work-Related Coccidioidomycosis (Valley Fever)"

available at: http://www.cdph.ca.gov/programs/hesis/Documents/CocciFact.pdf. (CDPH 2013a)

- Prior to Project construction initiation, and for any personnel additions after initial Project construction initiation, the following CDPH materials on Valley Fever (or the most updated materials applicable to Los Angeles County) shall be distributed to construction workers:
    - CDPH pamphlet entitled "Valley Fever Fact Sheet" available at: http://www.cdph.ca.gov/HealthInfo/discond/Documents/VFGeneral.pdf. (CDPH 2013b)
    - CDPH pamphlet entitled "Hoja de datos de la Fiebre del Valle (Valley Fever Fact Sheet in Spanish)" available at: http://www.cdph.ca.gov/HealthInfo/discond/Documents/HojaDeDatosDeLaFiebreDelValle.pdf (CDPH 2013c).
    - CDPH pamphlet entitled "Fact Sheet Valley Fever (Valley Fever Fact Sheet in Tagalog)," available at: http://www.cdph.ca.gov/HealthInfo/discond/Documents/TagalogGeneralValleyFeverFactSheet.pdf (CDPH 2013d).
- During rough grading and construction, the access way into the Project site from adjoining paved roadways shall be paved or treated with environmentally safe dust-control agents.
- <u>Provide evidence to the Department of Public Health that the Project Applicant/Developer has developed a "Valley Fever Training Handout," training, and schedule of sessions for education to be provided to all construction personnel. All evidence of the training session materials, training handout(s) and training schedule shall be submitted to the Department of Public Health within 24 hours of the first training session. Multiple training sessions may be conducted if different work crews will come to the Project site for different stages of construction; however, all construction personnel shall be provided training prior to beginning work. The evidence submitted to the Department of Public Health regarding the "Valley Fever Training Handout" and training sessions shall include the following:</u>

  - A sign-in sheet (to include the printed employee names, signature, and date) for all employees who attended the training session;
  - Distribution of a written flyer or brochure that includes educational information regarding the health effects of exposure to criteria pollutant emissions and Valley Fever (including the CDPH informational materials described in this mitigation measure);
  - Training on methods that may help prevent Valley Fever infection; and
  - Train employees how to use personal protective equipment, such as respiratory equipment, how to reduce exposure to pollutants, how to recognize symptoms of Valley Fever, and to promptly report any suspected systems to a work supervisor. Training shall also emphasize the benefits of wearing Tyvek suits in relation to Valley Fever exposure and explain that such protective clothing is available upon request. Proof that the demonstration is included in the training shall be submitted to the Department of Public Health.

- Provide construction workers separate, clean eating areas equipped with hand-washing facilities.
- Require crews to use masks or half-faced respirators equipped with a minimum N-95 protection factor and that are adequate to restrict inhalation of particulates during Project clearing, grading, and excavation operations in accordance with California Division of Occupational Safety and Health regulations. Respirator equipment shall be readily available and shall be provided to employees during work.
- Require employees to be medically evaluated, fit-tested, and properly trained on the use of the required masks or respirators
- Provide High-Efficiency Particulate Air (HEPA) filters for heavy equipment with factory enclosed cabs capable of accepting the filters. Require contractors utilizing applicable heavy equipment to furnish proof to the Department of Regional Planning of worker training on

proper use of applicable heavy equipment cabs, such as turning on air conditioning prior to using the equipment.

- Provide communication methods, such as two-way radios, for use in enclosed heavy equipment cabs.
- Install equipment inspection stations at each construction equipment access/egress point. Examine construction vehicles and equipment or excess soil materials and clean, as necessary before equipment is moved off-site.
- When possible, position construction workers upwind or crosswind when digging a trench or performing other soil-disturbing tasks.
- Prohibit smoking at the worksite outside of designated smoking areas; designated smoking areas will be equipped with hand-washing facilities.
- Post Valley Fever warnings at on-site construction areas and restrict access to such areas by visitors without adequate training and respiratory protection.
- Audit and enforce compliance with applicable California Occupational Safety and Health Administration health and safety standards on the job site.

MMs 3-10 and 3-11 are hereby added after MM 3-9 on page 5.3-39 as follows:

MM 3-10 The Project Applicant/Developer shall be responsible for ensuring the destruction of the historic water well associated with the former homestead in the central portion of the site is completed in full compliance with the requirements of the California Department of Water Resources' Water Well Standards, including Chapter II, Part III, Section 23 (Requirements for Destroying Wells). The applicable Local Enforcement Agency for implementation of the DWR's Well Standards is the Los Angeles County Department of Health Services, Drinking Water Program (LACDHS). The Project Applicant/Developer shall present documentation that is has complied with the DWR Well Standards to the LACDHS.

MM 3-11 The Project Applicant/Developer shall be responsible for the creation of a website on the proposed Centennial community internet that provides public information regarding dust-generating activities, to be maintained and updated as appropriate throughout the Centennial Project construction period. The purpose of the website would be to enable

interested parties both on- and off-site to easily access information relevant to potential Valley Fever risk. The Project Applicant/Developer shall also be responsible for the preparation and one-time distribution to surrounding communities and to all schools located in the communities of Gorman, Lebec, and Frazier Park of a notice describing the availability of this website to provide awareness of the site and its contents.

The following further edit was identified subsequent to publication of the Final EIR and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors. No further edits have been made to this text. MM 3-11, which was added into the Final EIR and would follow MMs 3-9 and 3-10 on page 5.3-39 of the Draft EIR, is hereby revised as follows:

MM 3-11 The Project Applicant/Developer shall be responsible for the creation of a website on the proposed Centennial community internet that provides public information in both English and Spanish regarding dust-generating activities, to be maintained and updated as appropriate throughout the Centennial Project construction period. The purpose of the website would be to enable interested parties both on- and off-site to easily access information relevant to potential Valley Fever risk, including information relevant to potential Valley Fever risks to pets, horses, and other animals that may be present at or around the Project site during construction activities. The Project Applicant/Developer shall also be responsible for the preparation and one-time distribution to surrounding communities and to all schools located in the communities of Gorman, Lebec, and Frazier Park of a notice describing the availability of this website to provide awareness of the site and its contents.

Section 5.4 – Water Quality

Table 5.4-9 on page 5.4-62 is hereby revised as follows:

TABLE 5.4-9
COMPARISON OF NUTRIENT CONCENTRATIONS WITH WATER QUALITY CRITERIA FOR THE PROJECT

Parameter	Predicted Average Annual Concentration (mg/L)	Los Angeles Basin Plan Surface Water Quality Objectives (mg/L)	Lahontan Basin Plan Surface Water Quality Objectives (mg/L)
Total Phosphorus	0.3	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growth causes nuisance or adversely affects beneficial uses.	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect the water for beneficial uses whereby discharges are not to cause excessive algae growth in receiving waters.
Total Nitrogen	3.2		
Nitrate-N + Nitrite-N	0.7	10[a]	10[b]
Total Ammonia	0.4	1.24[c~~b~~]	8.5[d~~c~~]

mg/L: milligrams per liter; ELS: early life stage ; pH: hydrogen potential; C: degrees Celsius; F: degrees Fahrenheit

[a] Waters shall not exceed 10 mg/L nitrogen as nitrate-nitrogen plus nitrite-nitrogen (NO3-N + NO2-N), 45 mg/L as nitrate (NO3), 10 mg/L as nitrate-nitrogen (NO3-N), or 1 mg/L as nitrite-nitrogen (NO2-N).

[b] Waters designated as MUN shall not contain concentrations of chemical constituents in excess of the maximum contaminant level (MCL) or secondary maximum contaminant level (SMCL) based upon drinking water standards specified in Title 22 of the California Code of Regulations. Waters shall not exceed 10 mg/L nitrogen as nitrate-nitrogen plus nitrite-nitrogen (NO3-N + NO2-N), 10 mg/L as nitrate-nitrogen (NO3-N), or 1 mg/L as nitrite-nitrogen (NO2-N).

[c~~b~~] 30-day average, ELS present, based on average pH (7.97) and average temperature of 25 °C.

[d~~c~~] Total Ammonia Water Quality Objective calculated using pH = 7.5 (log mean pH) and Temperature = 30°C (86°F), which is very conservative.

Source: Geosyntec Consultants 2016b

The following sentence in the Impact Summary on pages 5.4-66, 5.4-71, and 5.4-89 is hereby revised:

> Compliance with the LID performance standards and integrated pest management and landscaping BMP requirements will be reconfirmed ~~in drainage and landscape plans to be submitted to the County~~ in conjunction with each Project tract map review and approval process.

Table 5.4-12 on page 5.4-69 is hereby revised as follows:

> As discussed in Section 5.4.5, chloride and nitrate have a greater potential for infiltration because these constituents are more mobile and could reach groundwater by infiltration. Table 5.4-12 compares the predicted average

annual nitrate-N and chloride concentrations in Project post-development runoff with applicable groundwater quality objectives from the Los Angeles and Lahontan Basin Plans. As shown in Table 5.4-12, under developed conditions and including the proposed regional and distributed or parcel-specific LID BMPs, predicted average annual nitrate-N and chloride concentrations in Project runoff would be significantly below the nitrate-N groundwater quality objective in the Los Angeles Basin Plan ~~(no nitrate-N groundwater objective is included in the Lahontan Basin Plan)~~ and the Lahontan Basin Plan and the chloride groundwater objectives in both Basin Plans.

TABLE 5.4-12
COMPARISON OF ~~PREDICTED~~ NITRATE-N AND CHLORIDE CONCENTRATIONS WITH WATER QUALITY CRITERIA ~~GROUNDWATER QUALITY OBJECTIVES~~ FOR THE PROJECT SITE

Predicted Average Annual Concentration in Storm Water (mg/L)		Los Angeles Basin Plan Water Groundwater Quality Objectives (mg/L)		Lahontan Basin Plan Groundwater Quality Objectives (mg/L)[a]	
Nitrate-N	**Chloride**	**Nitrate-N**	**Chloride**	**Nitrate-N**	**Chloride**
0.7	17.3	10	~~100~~ 50	~~N/A~~ 10	250

mg/L: milligrams per liter~~; N/A: not applicable~~

[a] Waters designated as MUN shall not contain concentrations of chemical constituents in excess of the maximum contaminant level (MCL) or secondary maximum contaminant level (SMCL) based upon drinking water standards specified in Title 22 of the California Code of Regulations. Waters shall not exceed 10 mg/L nitrogen as nitrate-nitrogen plus nitrite-nitrogen (NO3-N + NO2-N), 10 mg/L as nitrate-nitrogen (NO3-N), or 1 mg/L as nitrite-nitrogen (NO2-N). ~~There is no Lahontan Basin Plan surface water quality objective for chloride in the Project site's receiving waters.~~

SEP Source: Geosyntec Consultants 2016b.

The following text is hereby added after the fourth paragraph on page 5.4-70:

A Salt and Nutrient Management Plan (SNMP) was developed for the Antelope Valley Groundwater Basin in May 2014. The baseline water quality analyses for the Antelope Valley Groundwater Basin included in the SNMP indicates that overall groundwater quality with respect to the SNMP constituents of concern is below the SNMP water quality management goals. These goals are consistent with the Regional Board's Basin Plan to protect the beneficial uses of the water. The analysis of future water quality (through 2035) indicates slowly increasing trends in the overall basin groundwater salt and nutrient quality that will remain below the SNMP water quality management goals. Therefore, no new implementation measures as part of the SNMP process are recommended at this time. Nevertheless, existing measures or practices are already in place to manage water quality, and frequent monitoring is recommended to assess trends in water quality.

The SNMP developed for the Antelope Valley Groundwater Basin in May 2014 proposes a monitoring plan to track the water quality in the basin. Results will be used to determine whether the concentrations of salt and nutrients over time are consistent with the SNMP predictions and the applicable SNMP water quality management goals. The monitoring program includes 32 municipal water supply wells that are currently monitored by the California Department of Public Health. The results from these existing monitoring programs will be downloaded from the State Board's Geotracker Groundwater Ambient Monitoring and Assessment (GAMA) database and included in the monitoring report prepared by the SNMP stakeholders or the appointed Antelope Valley Groundwater Basin Watermaster, if applicable. Imported, recycled, and treated potable water supply to the region will also be monitored and results included in the report. The Project must comply with all applicable requirements of the SNMP, including the identification or installation of appropriate groundwater monitoring wells in consultation with the SNMP stakeholders or the appointed Antelope Valley Groundwater Basin Watermaster, if applicable, to supplement the Antelope Valley SNMP monitoring program as necessary to implement the SNMP monitoring program in the Project area.

Salt and nutrient management implementation measures that are incorporated into the Project include:

- Municipal wastewater management. The proposed wastewater reclamation facilities (WRFs) s will incorporate tertiary treatment processes that include nitrification-denitrification treatment processes to control nitrate concentration in the effluent and recycled water. The WRFs will use ultraviolet light (UV) disinfection to reduce chloride concentrations as opposed to chlorination disinfection processes consistent with the Lahontan RWQCB and Title 22 requirements (see MM 19-2).
- Industrial waste management. The WRFs will implement industrial waste management measures (i.e., pretreatment program, educational outreach, and coordination with customers).
- Recycled water irrigation management. The implementation of recycled water is regulated by the Title 22 California Code of Regulations. Numerous BMPs and operating procedures will be followed when using recycled water for irrigation as required by Regional Board permits. These BMPs and operating procedures include water quality monitoring at the treatment plant; applying irrigation water at a rate that does not exceed the demand of the plants, with respect to water and nutrients; a site supervisor will be responsible for regulatory and permit compliance at all times; irrigation will not be allowed to occur at any time when unauthorized runoff may occur, such

as during times of rainfall or very low evapotranspiration, and any excessive overspray must be controlled.

- Low impact development techniques. As stormwater has low to no concentrations of salt and nutrients, the Project incorporates low impact development stormwater management techniques that promote groundwater recharge (see MM 4-1).
- Landscaping BMPs to limit nutrients in runoff. The Project will implement integrated pest management (IPM) and landscaping BMPs consistent with the integrated pest management and pesticide and fertilizer application guidelines established by the University of California Division of Agriculture and Natural Resources Statewide Integrated Pest Management Program. The IPM and landscaping BMPs will be confirmed in a Landscaping Plan submitted to the County during the review and approval process for each tract map application (see MM 4-2).

Results of the monitoring will be used to determine whether additional implementation measures are necessary to maintain the SNMP water quality management goals. Monitoring report results that indicate ambient groundwater quality exceeding 50 percent of the baseline assimilative capacity or significant increases may require additional modeling and/or evaluation to determine what mitigation action, if any, is necessary and appropriate. Such measures, which would be implemented by appropriate regional authorities in conjunction with the SNMP, may include:

- Reducing the amount of salts added to groundwater via source water – modified wastewater treatment processes such as increased retention time or blending prior to use for irrigation.
- Reducing the amount of salts and nutrients added to water via anthropogenic sources – BMPs, public outreach, and land management guidelines.
- An ordinance or ban on water softeners that uses salts may result in reduced chloride and slightly reduced TDS concentrations in the wastewater and ultimately reduced concentrations in the recycled water produced.

The first paragraph of MM 4-2 on page 5.4-90 is hereby revised as follows:

MM 4-2 The Project shall implement integrated pest management (IPM) and landscaping best management practices (BMPs) consistent with the integrated pest management and pesticide and fertilizer application guidelines established by the University of California Division of Agriculture and Natural Resources Statewide Integrated Pest Management Program which are

available online at http://www.ipm.ucdavis.edu/. The integrated pest management program will be provided to the County in association with the Landscape Plan submitted to the County with each tentative tract map. The IPM and landscaping BMPs shall be confirmed in a Landscaping Plan submitted to the County during the review and approval process for each tract map application. The BMPs shall include a Planting Plan that is consistent with the plant water use requirements of Section 3.~~3~~4 of the Centennial Specific Plan; with procedures for removing non- native vegetation and planting native vegetation; with fertilizer guidelines; and with the IPM approach for preventing or suppressing pest problems (i.e., insects and diseases). This shall be done through a combination of techniques including using pest-resistant plants; using biological controls; incorporating cultural practices; including habitat modification; and judiciously using pesticides. The IPM and landscaping BMPs shall, in addition to identifying IMP and landscaping BMP management and funding roles and responsibilities, monitoring, training, and timely IPM and BMP program review requirements to incorporate new technologies that may become available, address the following:

The following text is hereby added as the last bullet of MM 4-2 on page 5.4-91:

- All rodenticides containing anticoagulants shall be prohibited from use on the Project site or Mitigation Preserve lands. The probation shall be clearly described and distributed to home buyers through their home purchase contract and CC&Rs.

The following further edit was identified subsequent to publication of the Final EIR and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors. No further edits have been made to this text. The last bullet of MM 4-2 on page 5.4-91 of the Draft EIR is hereby revised as follows:

- All rodenticides containing anticoagulants shall be prohibited from use on the Project site or Mitigation Preserve lands. The ~~probation~~ prohibition shall be clearly described and distributed to home buyers through their home purchase contract and CC&Rs.

MMs 4-3 and 4-4 are hereby added after MM 4-2 on page 5.4-91 as follows:

MM 4-3 The Project shall, to the maximum extent feasible, retain, temporarily store and use native topsoil as topsoil cover in disturbed areas of the Project, and shall, in consultation with a qualified plant biologist, implement measures to encourage the

germination of native plants in locations where native topsoil is used as a topsoil cover within the Project.

MM 4-4 The Project Applicant/Developer shall prepare, in consultation with a qualified biologist, a Restoration and Revegetation Monitoring Plan for the Project. The Restoration and Revegetation Monitoring Plan shall include appropriate metrics, as determined by the qualified biologist, for determining the success of Project revegetation efforts, including revegetation implemented in compliance with the approved Mitigation and Monitoring Plan for the Project. The Restoration and Revegetation Monitoring Plan shall be submitted to the County and updated as appropriate during the review and approval process for each tract map application.

The following further edit was identified subsequent to publication of the Final EIR and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors. No further edits have been made to this text. MM 4-3 is hereby revised as follows:

MM 4-3 The Project shall, to the maximum extent feasible, retain, temporarily store and use native topsoil as topsoil cover in disturbed areas of the Project, and shall, in consultation with a qualified plant biologist, implement measures to encourage the germination of native plants in locations where native topsoil is used as a topsoil cover within the Project. Measures to encourage germination of native plants may include:

- Stockpile top soil at height no greater than 3 feet to retain native microorganisms
- Upon re-spreading of top soil, ensure soil placement areas are de-compacted for a minimum depth of one foot
- Conduct monthly weed removal following top soil placement in the first growing season and prior to seed setting to reduce competition for native plant species
- Conduct annual weed control in the post growing season, but prior to seed setting to further reduce and maintain low competition for native plant species
- Minimize disturbance of top soil to prevent new location for weed establishment
- Avoid irrigation overspray and run-off from adjacent areas that could lead to increased weed establishment
- Monitor and protect areas of native vegetation through signage and avoidance to the maximum extent feasible.
- Minimize weed seed source by implementing weed control on an as-needed basis and prohibit planting of non-native

invasive species identified by California Invasive Plant Council within adjacent areas.

Section 5.5 – Land Resources

Exhibit 5.5-1, following page 5.5-11, is hereby revised as follows:

~~F~~ L – Farmland of Local Importance

PDF 5-1 on page 5.5-12 is hereby revised as follows:

PDF 5-1 Project development would allow for continued grazing operations on portions of the Open Space preserve areas as a management tool for grassland conservation, subject to the specifications of the ~~Native Perennial Grassland and Wildflower Field Mitigation~~ Ranch-wide Management Plan ~~to be prepared as part of the Project implementation~~. Additionally, the Project would accommodate a total of 50 acres of small-scale agriculture and agriculture-related uses (e.g., community gardens, farmers markets/fresh fruit and vegetable stands, growing and sales of nursery stock, commercial greenhouses).

The second full paragraph on page 5.5-13 is hereby revised as follows:

Also, the Project would accommodate a total of 50 acres of small-scale agriculture and agriculture-related uses, including, but not limited to community gardens, farmers markets/fresh fruit and vegetable stands, growing and sales of nursery stock, and commercial greenhouses (PDF 5-1). However, these activities may or may not occur within the 642 acres of the site currently designated as Prime Farmland. ~~In addition, Tejon Ranch will put an agricultural preservation easement of not less than 489 acres of Prime and Unique farmland outside of the Project site, but on the Tejon Ranch property.~~

Section 5.6 – Cultural and Tribal Resources

The last three full sentences of the first partial paragraph on page 5.6-2 are hereby revised as follows:

However, sites CA-LAN-3217 and CA-LAN-3227 ~~is~~ are immediately adjacent the development footprint. Because of ~~its~~ their proximity, the sites could suffer damage during grading activities. Therefore, MM~~s~~ 6.1, MM 6-2, and MM 6-4 would be implemented for th~~is~~ese sites, and potential direct impacts to sites CA-LAN-3217 and CA-LAN-3227 during construction would be reduced to a less than significant level.

The first sentence of the last full paragraph of page 5.6-46 is hereby revised as follows:

> As identified in Table 5.6-1 above, there are a total of 2~~6~~5 prehistoric and historic archaeological sites within the development footprint.

The last sentence of page 5.6-48 is hereby revised as follows:

> Implementation of the Project would result in a less than significant impact to the 2~~4~~2 sites within the development footprint that have been determined ineligible for CRHR or are not cultural resources, and no mitigation is required; however, as testing may not have recovered all significant materials, these sites and a reasonable radius around them will be monitored during grading.

The first partial paragraph, beginning with the second full sentence, and the following full paragraph on page 5.6-50 are hereby revised as follows:

> Because these 12 sites are outside the development footprint, direct impacts during grading and other construction activities are not expected. However, sites CA-LAN-3217 and CA-LAN-3227 ~~is~~ are immediately adjacent the development footprint. Because of ~~its~~ their proximity, the sites could suffer damage during grading activities. Because sites CA-LAN-3217 and CA-LAN-3227 ~~is~~ are assumed CRHR-eligible, this would be considered a potential significant direct impact. Therefore, MM 6-1 requires monitoring by a qualified Archaeologist and a Native American monitor representing the Tejon Indian Tribe (pursuant to AB 52 consultation as described above) when grading is in the vicinity of these sites (MM 6-1); MM 6-2 requires the sites to be fenced off during construction to ensure complete avoidance of the resource; and MM 6-4 provides further protective measures if necessary. ~~Excavated finds shall be offered to the County of Los Angeles and/or its designee (i.e., the Tejon Indian Tribe) on a first refusal basis (MM 6-1); the Tejon Indian Tribe can then make a determination whether the find is a significant tribal cultural resource and opt to accept the resource for curation in the Tejon Tribe's facility.~~ With implementation of MM 6-1, MM 6-2, and MM 6-4, potential direct impacts to sites CA-LAN-3217 and CA-LAN-3227 during construction would be reduced to a less than significant level.
>
> Long-term operation of the Project would result in potential indirect impacts to the 12 sites in the Project's open space area with unknown eligibility and the 1 site located in the open space areas that is known to be eligible (CA-LAN-3206) if it is determined that such sites are vulnerable to disturbance due to increased access, by residents and visitors, to these areas of the site compared to the existing condition, wherein the sites are located entirely on private property. Because archaeological excavation is considered an adverse effect on an archaeological resource, avoidance and preservation of resources without excavation would be the preferred method of managing these sites. Therefore, MM 6-4 requires preparation of an Archaeological Resources Site-Protection Program aimed to protect and preserve any identified

archaeological resources that may be vulnerable to disturbance, unless a Phase II archaeological investigation performed by a qualified archaeologist determines that such site is not unique and thus not eligible for listing on the CRHR. The Archaeological Resources Site-Protection Program must be approved by the County and must include several alternatives to restrict access to these sites (e.g., fencing, planting, and capping), thereby protecting and preserving these sites. With implementation of MM 6-2 and MM 6-4, potential indirect impacts to the 12 sites within the Project site open space area with unknown eligibility and the 1 site located in the open space areas that is known to be eligible (CA-LAN-3206) ~~site CA-LAN-3227 during grading/construction~~ would be reduced to a less than significant level.

MMs 6-1 through 6-4 on pages 5.6-54 through 5.6-59 are hereby revised as follows:

MM 6-1 The Project Applicant/Developer shall retain a qualified Archaeologist who shall oversee archaeological monitoring of topsoil grading and removals (including clearing, grubbing, and trenching) in the immediate vicinity of the following 25 archaeological sites that are within the grading footprint and ~~1~~2 sites in the open space area that ~~is~~ are immediately adjacent to the development impact area: CA-LAN-3201, CA-LAN-3202H, CA-LAN-3217, CA-LAN-3219H, CA-LAN-3227, CA-LAN-3230, CA-LAN-3232, CA-LAN-3233, CA-LAN-3234, CA-LAN-3236, CA-LAN-3237, CA-LAN-3238, CA-LAN-3239, CA-LAN-3240, CA-LAN-3241, CA-LAN-3242, CA-LAN-3243, CA-LAN-3244, CA-LAN-3245, CA-LAN-3246, CA-LAN-3247, CA-LAN-3248, CA-LAN-3250, CA-LAN-3251, CA-LAN-3252, CA-LAN-3253, and CA-LAN-3985H. CA-LAN-3217 and CA-LAN-3227 ~~is~~ are ~~the site~~ immediately adjacent to the grading footprint. Additionally, a Native American monitor representing the Tejon Indian Tribe shall be present during topsoil grading and removals in the vicinity of the 2~~6~~7 above-listed archaeological sites.

~~T~~ Prior to the issuance of grading permits, the Project Applicant/Developer shall provide written evidence to the County that a qualified Archaeologist has been retained~~;~~ to carry out all mitigation measures related to archeological and historical resources. A qualified Archaeologist is defined as an archaeologist meeting the Secretary of the Interior's Standards for professional archaeology. The qualified Archaeologist shall: be present at the pre-grading meeting; ~~shall~~ establish procedures for archaeological resource surveillance, including coordination with representatives of the Tejon Indian Tribe on the location and schedule of Native American monitoring; and ~~shall~~ establish (in cooperation with the Project Applicant/Developer and/or County as well as the Tejon Indian

Tribe) procedures for temporarily halting or redirecting work to permit the sampling, identification, and evaluation of any artifacts found, as appropriate.

The qualified Archaeologist shall develop and submit an Archaeological Resource Monitoring Plan to the County for sites in development areas. The qualified Archaeologist and a Native American monitor representing the Tejon Indian Tribe shall be retained to attend pre-grade meetings and to monitor earth-moving activities, including clearing, grubbing and trenching, in the vicinity (i.e., the area of a site reasonably expected to contain archaeological resources plus a buffer of at least 10 meters [33 feet]) of any and/or all cultural resource sites. For implementation of each tract map, if no subsurface Native American or archaeological remains are identified in the vicinity of an archaeological resources site during that initial grading, continuous monitoring will no longer be required but the Project Archaeologist and Native American monitor shall spot-check all additional subsurface excavations in the vicinity of an archaeological resources site at least once a week for the duration of grading and excavation activities or until the monitor deems site clear. The Project Archaeologist shall be responsible for coordinating the location and schedule of Native American monitors.

The Archaeologist and Native American monitor shall carefully inspect these areas to assess the potential for significant prehistoric or historic remains. If potentially significant archaeological resources are uncovered, the qualified Archaeologist and Native American monitor shall halt or redirect ground-disturbing activities away from the vicinity, and a subsurface test and/or evaluation shall be performed to assess the discovery. Further subsurface investigation or data recovery shall be undertaken if the resource is determined by the Project Archaeologist to be unique or historically significant (i.e., important for its prehistoric or historic information) and therefore eligible for the California Register of Historical Resources (CRHR).

The archaeological procedures required by the Archaeological Resource Monitoring Plan shall be incorporated as a note on the Grading Plan cover sheet. If additional or unexpected archaeological features are discovered, the qualified Archaeologist shall report such findings in writing to the County and/or the Tejon Indian Tribe. If archaeological resources are found to be of possible significance, the qualified Archaeologist

shall determine appropriate actions, in cooperation with the County and the Tejon Indian Tribe, for further exploration and/or salvage in accordance with this mitigation measure.

The Archaeologist shall submit a Follow-up Report to the County. The Follow-up Report shall include: the period of inspection; an analysis of any artifacts found; and the present repository of the artifacts. Recovered finds shall be offered to the County of Los Angeles and the Tejon Indian Tribe on a first refusal basis. If the artifacts are refused, the Project Applicant/Developer may retain said finds if written assurance is provided that they will be properly preserved in Los Angeles County, unless (1) said finds are of special significance or (2) a museum in the County of Los Angeles indicates a desire to study and/or display them, in which case the items shall be donated to the County or its designee. If the Project Applicant/Developer provides no such assurance, the County shall retain the artifacts and shall be subject to the same stipulations set forth in this mitigation measure for disposition of artifacts. These actions, as well as final mitigation and disposition of the resources, shall be subject to the approval of the County.

The Project ~~Applicant/Developer shall retain a certified~~ Archaeologist ~~who~~ will perform a Phase II subsurface test-level investigation and surface collection for archaeological resource sites of undetermined CRHR eligibility discovered during monitoring. A Phase II Test-level Report shall be completed that evaluates the sites; includes a discussion of the sites' significance (depth, nature, condition, and extent of the resources); and contains recommendations for final mitigation and cost estimates (if required) to fully mitigate significant impacts. Should the Phase II subsurface test-level investigation and surface collection determine the ~~potential~~ presence of significant ~~subsurface~~ archaeological resources that are eligible for CRHR listing, then potential Project impacts to the eligible archaeological resources site shall be mitigated to a less than significant level through the implementation of one of the mitigation options discussed below~~.~~:

a. Relocation of grading boundaries and fuel modification zones to completely avoid disturbance to the site(s) of eligible archaeological resources. ~~Should boundary relocation be infeasible~~ If it is determined that the relocation of grading boundaries and fuel modification zones in accordance with this subsection (a) is not feasible, then a qualified Archaeologist shall be present

in the vicinity of eligible archaeological resources sites during grading and fuel modification brush clearance. (**NOTE:** confidential archaeological mapping is on file at the Natural History Museum of Los Angeles County and the South Central Coastal Information Center [SCCIC] at California State University, Fullerton. Review of this material is restricted to qualified individuals and project proponents on a need to know basis.) Fencing shall be erected outside the eligible archaeological resources sites to visually depict the areas to be avoided during construction. All eligible archaeological resources sites avoided in accordance with this subsection (a) shall be subject to the preservation requirements of MM 6-4.

b. Per California Environmental Quality Act (CEQA) Guidelines Section 15126.4(b)(3)(A), grading boundary redesign and preservation in accordance with subsection (a) shall be the preferred means to avoid impacts to eligible archaeological resources. However, consistent with CEQA Guidelines Section 15126(b)(3)(C), ~~I~~if it is determined that avoidance and/or preservation of any eligible archaeological resources sites in accordance with subsection (a) are not feasible, then prior to grading in the vicinity of such eligible archaeological resources sites, Phase III data recovery (salvage excavations) shall be conducted for ~~these~~ such eligible archaeological sites or any other eligible sites within the potential impact area of development that cannot be avoided. (**NOTE:** confidential archaeological mapping is on file at the Natural History Museum of Los Angeles County and the SCCIC. Review of this material is restricted to qualified individuals and project proponents on a need to know basis.) When Phase III data recovery is undertaken, a data recovery plan, which makes provision for adequately recovering the scientifically consequential information from and about the eligible archaeological resource, shall be prepared by a qualified Archaeologist prior to any excavation being undertaken. The Phase III work shall provide sufficient scientific information to fully mitigate the impacts of development on these sites to a level considered less than significant and shall be performed in accordance with the standards of the State Historic Preservation Office (SHPO).

Excavated assemblages shall be offered to the County and/or the Tejon Indian Tribe on a first refusal basis. If the artifacts are

refused, the Project Applicant/Developer may retain said finds if written assurance is provided that they will be properly preserved in Los Angeles County, unless (1) said finds are of special significance or (2) a museum in the County of Los Angeles indicates a desire to study and/or display them, in which case the items shall be donated to the County or its designee. If the Project Applicant/Developer provides no such assurance, the County shall retain the artifacts and shall be subject to the same stipulations set forth in this mitigation measure for disposition of artifacts. Final mitigation shall be carried out based upon the recommendations in the Phase II Test-Level Report, and the County of Los Angeles Department of Regional Planning shall make a determination as to the site's disposition based on the recommendations of the qualified Archaeologist. Possible determinations include, but are not limited to, preservation, salvage, partial salvage, or no mitigation necessary.

MM 6-2 Prior to ground disturbing activities, ~~A~~archaeological sites CA-LAN-3201, CA-LAN-3206, CA-LAN-3217, CA-LAN-3227, CA-LAN-3240, and CA-LAN-3242 shall be surrounded with high visibility construction fencing with a buffer of approximately 50 feet around each site to ensure that the archaeological sites are completely avoided during construction-related activities. A qualified Archaeologist shall work with surveying teams and the Construction Supervisor to fence the area to be avoided prior to the commencement of grading.

MM 6-3 Prior to the issuance of grading permits, the ~~The~~ Project Applicant/Developer shall ~~retain~~ provide written evidence to the County that a qualified Archaeologist has been retained to carry out all mitigate~~e~~ion measures related ~~impacts~~ to eligible archaeological sites within the development impact area. A qualified Archaeologist is defined as an archaeologist meeting the Secretary of the Interior's Standards for professional archaeology. ~~Additionally, and~~ A qualified Archaeologist and a Native American monitor representing the Tejon Indian Tribe shall be present during ground-disturbing activities (i.e, topsoil grading and removals) in the vicinity of the following three ~~below-listed~~ eligible archaeological sites~~.~~: CA-LAN-3201; CA-LAN-3240; CA-LAN-3242. Impacts to these three eligible sites ~~(CA-LAN-3201, CA-LAN-3240, and CA-LAN-3242)~~ shall be mitigated to a less than significant level through the implementation of one of the mitigation options described below~~.~~:

a. Relocation of grading boundaries and fuel modification zones to completely avoid disturbance to the site(s). ~~Should boundary relocation be infeasible~~ If it is determined that the relocation of grading boundaries and fuel modification zones in accordance with this subsection (a) is not feasible with respect to eligible archaeological resources sites CA-LAN-3201, CA-LAN-3240 and/or CA-LAN-3242, then a qualified Archaeologist and a Native American monitor representing the Tejon Indian Tribe shall be present in the vicinity of any such eligible archaeological resources site during grading and fuel modification brush clearance to monitor all activities and ensure that archaeological resources are not impacted. (**NOTE:** confidential archaeological mapping is on file at the Natural History Museum of Los Angeles County and the SCCIC. Review of this material is restricted to qualified individuals and project proponents on a need to know basis.) Temporary construction ~~F~~fencing shall be erected outside ~~the~~ any such eligible archaeological resources site~~s~~ to visually depict the areas to be avoided during construction, in accordance with MM 6-2. Any temporary fencing materials (i.e., plastic web, chain link, etc.) placed during construction should not become permanent. Any permanent fencing erected in accordance with MM 6-4 to protect the sites should be visually pleasing and consistent with the overall aesthetic experience of the community of Centennial. All eligible archaeological resources sites avoided in accordance within this subsection (a) shall be subject to the preservation requirements of MM 6-4.

b. Per California Environmental Quality Act (CEQA) Guidelines Section 15126.4(b)(3)(A), grading boundary redesign and preservation in place in accordance with subsection (a) shall be the preferred means to avoid impacts to eligible archaeological resources. However, consistent with CEQA Guidelines Section 15126.4(b)(3)(C), if it is determined that ~~If~~ avoidance and/or preservation of any eligible archaeological resources sites in accordance with subsection (a) is ~~are~~ not feasible, then prior to grading in the vicinity of such archaeological resources sites, Phase III data recovery (salvage excavations) shall be conducted for ~~these~~ such archaeological resources sites or any other eligible sites within the potential impact area of development that

cannot be avoided. (**NOTE:** confidential archaeological mapping is on file at the Natural History Museum of Los Angeles County and the SCCIC. Review of this material is restricted to qualified individuals and project proponents on a need to know basis.) When Phase III data recovery is undertaken, a data recovery plan, which makes provision for adequately recovering the scientifically consequential information from and about the eligible archaeological resource, shall be prepared by a qualified Archaeologist prior to any excavation being undertaken. The Phase III work shall provide sufficient scientific information to fully mitigate the impacts of development on these sites and shall be performed in accordance with the standards of the SHPO.

Excavated finds shall be offered to the County and/or the Tejon Indian Tribe on a first refusal basis. If the artifacts are refused, the Project Applicant/Developer may retain said finds if written assurance is provided that they will be properly preserved in Los Angeles County, unless (1) said finds are of special significance or (2) a museum in the County of Los Angeles indicates a desire to study and/or display them, in which case the items shall be donated to the County or its designee. If the Project Applicant/Developer provides no such assurance, the County shall retain the artifacts and shall be subject to the same stipulations set forth in this mitigation measure for disposition of artifacts. Final mitigation shall be carried out based upon the recommendations in the Phase II Test-Level Report, and the County shall make a determination as to the site's disposition based on the recommendations of the qualified Archaeologist and the Native American monitor representing the Tejon Indian Tribe. Possible determinations include, but are not limited to, preservation, salvage, partial salvage, or no mitigation necessary.

MM 6-4 ~~The Project Applicant/Developer~~ A qualified Archaeologist meeting the requirements of the Secretary of the Interior's Standards for professional archaeology shall develop and implement an Archaeological Resources Site-Protection Program aimed to protect and preserve identified CRHR-eligible archaeological resources avoided in accordance with subsection (a) of MM 6-1 and/or MM 6-3, as well as any identified archaeological resources site located within the Project site's open space areas that is of known eligibility for CRHR listing and which are vulnerable to disturbance during Project construction and/or operation. Identified archaeological resources sites

located within the Project site's open space that are of unknown eligibility for CRHR listing and which are vulnerable to disturbance shall also be protected under the Archaeological Resources Site-Protection Program in accordance with this MM 6-4, provided that no such site shall be subject to this MM 6-4 if a Phase II archaeological investigation performed by a qualified Archaeologist in accordance with Secretary of the Interior Standards determines that such site is not unique and is thus ineligible for CRHR listing. Th~~is~~e Archaeological Resources Site-Protection P~~p~~rogram shall be prepared by the qualified monitoring Archaeologist familiar with the resources present within the Project boundaries, ~~and~~ shall be approved by the County, and shall include implementation of one or more of the following:

a. Fencing and/or other access-restriction methods shall be placed around the archaeologically sensitive areas of the Project site to inhibit human access. This ~~is especially~~ subsection (a) shall be applicable to sites CA-LAN-3217 and CA-LAN-3227, unless the qualified Archaeologist determines that such sites are more appropriately protected in accordance with subsections (b) or (c) of this MM 6-4~~.~~; or

b. Non-invasive plant species with thorns (e.g., prickly pear cactus [*Opuntia* spp.]) or other deterrent characteristics shall be planted in areas close to known resources in order to discourage human presence; this is generally applicable to the majority of sites to be preserved in areas of native vegetation~~.~~; or

c. Known eligible resources shall be capped with a layer of chemically inactive soil/sediment, in consultation with a qualified Archaeologist. This ~~is especially~~ subsection (c) shall be applicable to sites CA-LAN-3201, ~~CA-LAN-3206,~~ CA-LAN-3240, and CA-LAN-3242, to the extent such sites are avoided in accordance with subsection (a) of MM 6-3, unless the qualified Archaeologist determines that any such site is more appropriately protected in accordance with subsections (a) or (b) of this MM 6-4. This subsection (c) shall be applicable to site CA-LAN-3206, unless, pursuant to the County-approved Archaeological Resources Site-Protection Program required by this MM 6-4, it is determined that such site is not vulnerable to disturbance.

~~The above-mentioned mitigation~~ This MM 6-4 shall be implemented prior to the completion of construction activities and shall be overseen by the County and/or the Tejon Indian Tribe. The qualified Archaeologist shall prepare a written statement documenting appropriate site-protection measures for submittal to the County. Additionally, a Native American monitor representing the Tejon Indian Tribe shall be present during all initial surface grubbing, initial ground surface grading, and any excavation greater than one-half foot in depth. ~~For implementation of each tract map, if no subsurface Native American or archaeological remains are identified during that initial grading, continuous monitoring will no longer be required but the Native American monitor shall spot-check all additional subsurface excavations at least once a week for the duration of grading and excavation activities or until monitor deems site clear. The Project Archaeologist shall be responsible for coordinating the location and schedule of Native American monitors.~~

The following further edit was identified subsequent to publication of the Final EIR and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors. No further edits have been made to this text. The last paragraph of MM 6-1, which starts on page 5.6-56 of the Draft EIR, is hereby revised as follows:

Excavated assemblages shall be offered to the County and/or the Tejon Indian Tribe on a first refusal basis. If the artifacts are refused, the Project Applicant/Developer may retain said finds if written assurance is provided that they will be properly preserved in Los Angeles County, unless (1) said finds are of special significance or (2) a museum in the County of Los Angeles indicates a desire to study and/or display them, in which case the items shall be donated to the County or its designee. If the Project Applicant/Developer provides no such assurance, the County shall retain the artifacts and shall be subject to the same stipulations set forth in this mitigation measure for disposition of artifacts. Final mitigation shall be carried out based upon the recommendations in the Phase II Test Level Report, and the Natural History Museum of Los Angeles County shall make a determination as to the site's disposition based on the recommendations of the qualified Archaeologist. Possible determinations include, but are not limited to, preservation, salvage, partial salvage, or no mitigation necessary.

Section 5.7 – Biological Resources

The first sentence of the last paragraph on page 5.7-24 is hereby revised as follows:

Nomenclature for vegetation types in the areas described in the paragraph above generally follows that of The Vegetation Classification and Mapping

> Program: *List of California Terrestrial Natural Communities Recognized by the California Natural Diversity Database* (CDFG ~~2010~~ 2003).

The second sentence of the first full paragraph on page 5.7-25 is hereby revised as follows:

> The minimum mapping unit was set at approximately one acre, and patches of vegetation smaller than this were generally not mapped except for observed seeps~~, and~~ ephemeral ponds, and other unique stands.

The following revision is hereby made on page 5.7-35:

> Coffeeberry Scrub (37.000.00)
>
> This vegetation type is dominated by hoary coffeeberry (*Frangula ~~tomentella~~ californica* ssp. *cuspidata*) and oak gooseberry (*Ribes quercetorum*).

The following text is hereby added at the end of the second paragraph in the "Mammals" section on page 5.7-50:

> The habitat value, and potential for sensitive bat species occurrence, was evaluated for the remnant "mineshaft" entrance northwest of Quail Lake. The site is shallow and exposed (approximately 6 feet deep by 4 feet tall by 5 ½ feet wide) and, accordingly, does not provide the type of habitat used by bats. No bats were observed, and there is no evidence of prior or current bat occupancy.

The first sentence of the last partial paragraph on page 5.7-62 is hereby revised as follows:

> Under the TRCRWA, the Tejon Ranch Conservancy will adopt, update, monitor and enforce implementation of the Ranch-~~W~~wide Management Plan (RWMP) (Final EIR Appendix 5.7-D) on dedicated conservation areas and option areas subject to conservation, preservation, mitigation, and enhancement measures, as required under applicable law or imposed by federal, State or local agencies as part of any permit or approval for the Ranch or projects within the Ranch.

Table 5.7-5, Special Status Plant Species Table, on page 5.7-72 of the Draft EIR is hereby revised as follows:

Opuntia basilaris var. *treleasei* Bakersfield cactus	FE	SE	1B.1	Alluvial benches and fans in arid plains. ~~No suitable habitat is present on the site. Not expected to occur.~~ In 2013, a population was discovered approximately one mile from the survey area. Potentially suitable habitat occurs on the site. Potential to occur.	Not Observed

The first partial paragraph, beginning with the first full sentence, on page 5.7-113 is hereby revised as follows:

> The tricolored blackbird was observed nesting in large numbers along the north-central edge of the Project site and was also observed in Oso Creek (BonTerra Consulting 2008; Impact Sciences 2004a). These populations have not been incidentally detected during focused surveys since the original observations, possibly due to habitat degradation. Most recently, focused surveys for tricolored blackbird were conducted in 2015 and they were observed nesting off site along the northern shore of Quail Lake and at Holiday Lake, and these birds were observed foraging on the Project site (BonTerra Psomas 2015d).

The third sentence of the first full paragraph on page 5.7-116 is hereby revised as follows:

> ~~Unpublished data from Pete Bloom and Woodridge (2004) indicates that there has been recent recolonization of historic habitats in the Antelope Valley and population increases in the Owens Valley.~~ Recent surveys have suggested this species is recolonizing portions of its historic range in the Antelope (CDFW 2016b).

The following text is hereby added immediately following the seventh sentence of the first full paragraph on page 5.7-128:

> In the vicinity of the Project site, this species has been reported in the Fish Creek Area, Northrup Area, and upper Oso Canyon (Geivet 2009). Exhibit B.4-34, Pronghorn Observations on Tejon Ranch, illustrates the locations and distribution of pronghorn antelope observations on and near the Project site with Tejon Ranch.

The fourth sentence of the second full paragraph on page 5.7-133 is hereby revised as follows:

> Exhibit 5.7-9, Jurisdictional Drainage Features, depicts the location and extent of jurisdictional features on the Project site and has been modified to increase the size of features to facilitate viewing ability, and a footnote has been revised to indicate that some features appear larger than they really are.

The following revisions are hereby made to Table 5.7-10 on page 5.7-134:

TABLE 5.7-10
WITH MESA MEMO MODIFICATIONS (MAY 2017)
ONSITE JURISDICTIONAL WETLANDS AND WATERS SUMMARY

Agency with Jurisdiction		On Site	Off Site	Total Project Area (acres)
USACE*	acres	1.7	~~0.1~~ 0.0	~~**1.8**~~ **1.7**
	linear feet	~~21,896~~ 21,843	~~23~~ 0	~~**21,919**~~ **21,843**
CDFW	acres	~~165.3~~ 169.0	0.3	~~**165.6**~~ **169.3**
	linear feet	~~551,061~~ 562.276	~~2,273~~ 1.635	~~**553,334**~~ **563,911**
RWQCB	acres	~~148.9~~ 150.2	0.3	~~**149.2**~~ **150.5**
	linear feet	~~551,061~~ 562.276	~~2,273~~ 1.635	~~**553,334**~~ **563,911**

USACE: U.S. Army Corps of Engineers; CDFW: California Department of Fish and Wildlife; RWQCB: Regional Water Quality Control Board

* All of the USACE acreage consists of non-wetland waters

Source: BonTerra Psomas 2015a

The third paragraph of PDF 7-1 on pages 5.7-135 and 5.7-136 is hereby revised as follows:

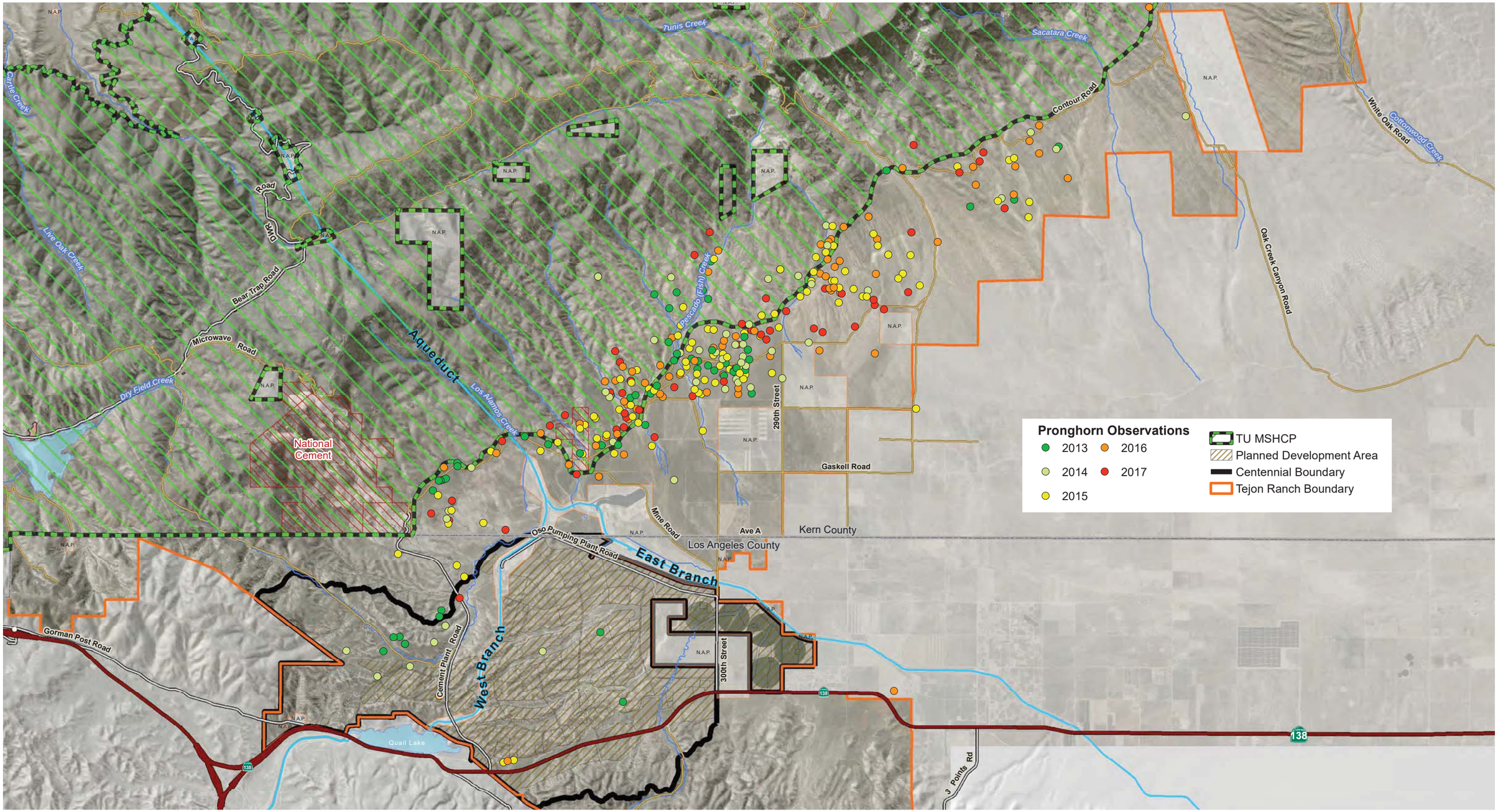
> These areas combine to form an extensive regional mitigation preserve system of ~~27,408~~ 43,079 acres (see revised Exhibit 5.7-10, Mitigation Preserve). Detailed floral sampling was conducted within grasslands on the Project site including impact areas, as well as within the Mitigation Preserve (NRC 2006a, 2007a, 2007b, 2007c, 2008b). Generally, studies consisted of quadrat sampling (338 total quadrats) and analysis of data generated results on regional species composition, between-site species composition, and plant community-based analysis~~.~~ within grasslands on the Project site within the impact area and mitigation areas (NRC 2008b) and 2016, and 2017 site reconnaissance surveys over a period of ~~four~~ five days, within mitigation areas.

The first sentence of the fourth paragraph of PDF 7-1 on page 5.7-136 is hereby revised as follows:

> The proposed ~~27,408~~ 43,079-acre preserve system contains all major habitat types affected by the Project, as well as particular individual biological resource values which are described in each of the corresponding mitigation plans.

The following text is hereby added immediately following the sixth paragraph of PDF 7-1 on page 5.7-136:

> The Mitigation Preserve contains existing uses such as trails and access roads, as well as the proposed realignment of the Pacific Crest Trail. The uses mentioned here are consistent with the goals of the mitigation preserve. MM 7-17 includes a public awareness program which includes signage



"D:\Projects\3CEN\Centennial\GRAPHICS\Response_to_Comments\Ex_Tejon_Pronghorn_20171108.ai"

Source: Tejon Ranch Conservancy 2017

Pronghorn Observations on Tejon Ranch

Exhibit Response B.4-34

Not to Scale

Oso Canyon

NAP

NAP

Quail Lake

Tenrock Canyon

Project Boundary

CDFW/RWQCB Jurisdictional Drainage Feature

RWQCB Jurisdictional Isolated Water Feature

USACE Jurisdictional Drainage Feature

Non-Jurisdictional Ponded Feature

NAP Not A Part

Note: The drainage features displayed here are not represented at their actual size, they have been modified to be visible at the scale of this map.

Source: Glenn Lukos Associates 2009

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Jurisdictional Drainage Features

Exhibit 5.7-9

Centennial Project

N W E S

0.5 0.25 0 0.5 Miles

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Project Boundary
Mitigation Preserve
Tejon Ranch Conservation Area

Potential Restoration Type

Grassland
Oak Woodland
Riparian
Other

NAP Not A Part

Tejon Ranch

Area 1
Area 2
Area 3
Area 4
Area 5
Area 6
Area 7
Area 7

NAP

138
138

Old Ridge Route
Lancaster Rd
W Avenue D
170th Street West
Pine Canyon Rd
ngs Rd

5

Mitigation	Grassland	Total Acreage
On-site		
North	1,899	2,898
South	90	968
Subtotal (Total On-site Mitigation Area)	1,989	3,865
Off-site		
Area 1	1,734	6,417
Area 2	1,597	2,556
Area 3	3,059	4,183
Area 4	4,494	7,319
Area 5	643	643
Area 6	1,005	2,429
Area 7	7,877	15,668
Subtotal (Total Off-site Mitigation Area)	20,409	39,215
Total Area	**22,398**	**43,080**

Project Boundary
Off-Site Mitigation Preserve
On-Site Mitigation Preserve

Tejon Ranch

138
5

Map Overview
5 2.5 0 5 Miles

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Mitigation Preserve

Exhibit 5.7-10

Centennial Project

N W E S

2 1 0 2 Miles

(Rev: 02-20-2018 CJS) R:\Projects\CEN\000306\Graphics\EIR\Ex5.7-10_Open_Space_Mitigation.pdf

denoting sensitive areas. These project requirements are expected to minimize disturbances associated with trail usage and human activity within and adjacent to the Mitigation Preserve.

The second paragraph of PDF 7-2 on page 5.7-137 is hereby revised as follows:

Mitigation lands for impacts to biological resources would consist of approximately ~~3,861~~ 3,866 acres of unimpacted~~/~~ SEA lands on the site and ~~23,547~~ 39,213 acres within additional off-site areas, ~~including~~ consisting of areas on Tejon Ranch, referred to as Areas 1 through ~~6~~ 7. These mitigation lands comprise two on-site and ~~six~~ seven off-site areas which would provide sufficient land and biological resources to implement mitigation strategies to fully mitigate for Project impacts. ~~Two~~ The majority of three of these areas, Areas 3 ~~and,~~ 4, and 5, are the subject of the Wildlife Conservation Board conservation easements that expressly allow for such mitigation use of these lands. These areas, although available for mitigation activities that include enhancement, restoration, or creation, are not available for preserved mitigation acreage since the existing Conservation Easement already requires preservation (but allows mitigation use for enhancement, restoration, or creation).

The second sentence of the fourth paragraph of PDF 7-2 on page 5.7-137 is hereby revised as follows:

~~These lands~~ Within Area 1, 6,357 acres are located within Significant Ecological Area (SEA) No. 17 and support many resources including a relatively undisturbed north-to-south running riparian corridor that provides connectivity to the wildlands to the south of the site.

The following text is hereby added after the ninth paragraph of PDF 7-2 on page 5.7-138:

Area 7 consists of two distinct areas that comprise 15,668 acres total. Area 7 is in Kern County on the northern slope of the Antelope Valley. The westernmost portion of Area 7 sits between Areas 3 and 4, while the easternmost portion occurs east of Area 4 and borders Area 6 to the north. Approximately half of Area 7 is dominated by undifferentiated grasslands, which are scattered throughout but mostly occurring in the southern half of this mitigation area. The other half of Area 7 is covered in various scrub types such as mixed chaparral, desert scrub, and sagebrush, and at higher elevations oak woodland, montane chaparral, montane hardwood-conifer forest, and pinyon-juniper forest. Several major northwest-to-southeast trending drainage features are found within Area 7 that contain riparian vegetation, oak woodland, and Joshua tree woodland.

The tenth paragraph of PDF 7-2 on page 5.7-138 is hereby revised as follows:

> The combined off-site Mmitigation Ppreserve area amounts to ~~23,547~~ 39,213 acres of mitigation lands. In total, the mitigation preserve system available for mitigation covers ~~27,408~~ 43,079 acres and includes both on- and off-site mitigation areas. Appropriate lands with grassland resources have been included in the Mitigation Preserve to ensure a 2:1 replacement ratio in areas outside the existing WCB conservation easements. Furthermore, enhancement activities may be implemented within, but may not be limited to, Mitigation Preserve Areas 3, 4, and 5.

The last two sentences of the second paragraph on page 5.7-142 are hereby revised as follows:

> Implementation of MM 7-1, proposed to mitigate for impacts to special status plants, would reduce the level of impact by promoting the distribution of this species in the Project region through the preservation and/or ~~propagation~~ enhancement of ~~new~~ existing populations and creation of new populations, if necessary, in the Mitigation Preserve. The expansion of the local population of this species is expected to increase its potential to be sustained in perpetuity.

The last two sentences of the first partial paragraph on page 5.7-143 are hereby revised as follows:

> Implementation of MM 7-1, to mitigate for impacts to special status plants, would reduce the level of impact by promoting the distribution of this species in the Project region through the preservation and/or ~~propagation~~ enhancement of ~~new~~ existing populations in the Mitigation Preserve. The expansion of the local population of this species is expected to increase its potential to be sustained in perpetuity.

The second paragraph, beginning with the fourth sentence, on page 5.7-148 is revised as follows:

> ~~All~~ Most adult California condors are wing-tagged and many are fitted with radio transmitters. ~~These birds have~~ The condor has been documented flying high over the area (with one reported landing), but foraging and breeding activities are conducted elsewhere and not on or in the vicinity of the Project site (Bloom 2009; BonTerra Psomas 2015d). Therefore, Project implementation is not expected to result in ~~any~~ impacts on the condor ~~these two species~~ and no mitigation is required. MM 7-6 is included to further ensure that the proposed Project does not result in future impacts on the California condor. The bald eagle may occur infrequently for foraging, and marginal breeding habitat occurs on-site or adjacent to Quail Lake. Due to the limited use expected, and available foraging habitat at Quail Lake, impacts to foraging habitat would be considered adverse but less than significant per State CEQA Guidelines. Potential breeding sites are located outside the impact area and

direct impacts to breeding bald eagles are not expected to occur; however, MM 7-8 is provided to ensure no direct impacts occur.

The third full sentence on the top of page 5.7-149 is hereby revised as follows:

The primary threat to this species is the loss of breeding habitats, which are not present on the Project site; therefore, these impacts are considered adverse but less than significant and no mitigation is required. As with other migratory birds, however, this species may occur as a breeder in the future and MM 7-2 is included to conduct pre-construction protocol surveys for the Swainson's hawk to confirm absence prior to disturbance.

The second full paragraph, beginning with the third sentence, on page 5.7-149 is hereby revised as follows:

The results of this focused survey documented relatively heavy use of the Project site for foraging purposes by tricolored blackbirds nesting off site at Quail Lake, and to a much lesser degree, Holiday Lake. No breeding was detected at Oso Creek or along the north-central edge of the Project site. Breeding has not been observed in either location since 2008, likely due to habitat degradation. In an effort to determine the Project's potential effect on tricolored blackbird nesting colony foraging lands of the region, an assessment of each of four known colonies was conducted (BonTerra Psomas 2015c).

The third full paragraph on page 5.7-149 is hereby revised as follows:

Due to the shifting of tricolored blackbird nesting locations from year to year, a subset of two or three of the available nesting locations may represent the entire regional breeding population. A substantial reduction of foraging lands surrounding this subset of nesting locations could result in considerable reduction of nesting success. A review of the Quail Lake and the on-site colony subset identified a potential post-Project reduction of approximately 20 percent of potentially suitable foraging habitat at each location. In a given year, if these two areas were used for nesting, the reduced availability of suitable foraging land could result in substantial reduction in nesting success. However, the north pond has become unsuitable habitat, so the likelihood of its future use by tricolored blackbird is very low. Additionally, the species shifts breeding locations between sites, and there are also existing potentially suitable breeding locations within the Mitigation Preserve, so the likelihood that both areas will be used for breeding at the same time is extremely low. Nevertheless, MM 7-7 has been modified to require a ¼ mile setback during breeding season, which will protect the breeding colony for that season during construction. Furthermore, MM 7-10 has been modified to preserve additional mitigation lands, which includes preservation and management of 15,258 acres of suitable foraging habitat for tricolored blackbird and the Mitigation Preserve includes 1.1 acres of existing breeding habitat. Finally, MM 7-12 will preserve and enhance wetland areas, which will provide more breeding

habitat. Thus, with mitigation, there is sufficient foraging habitat to support the existing colonies in the Project vicinity and provide additional breeding and foraging opportunities in the Mitigation Preserve. This preservation of breeding and foraging habitat in a diversity of areas allows for this wide forage ranging species to continue to persist in the region. Based on the revised MMs 7-7, 7-10, and 7-12, the impacts to foraging habitat are less than significant.

The fifth sentence of the first full paragraph on page 5.7-150 is hereby revised as follows:

Temporary impacts (i.e., construction noise) within ¼ mile ~~400 feet~~ of active nesting areas shall be restricted to the non-breeding season.

The following edit is hereby made within the first paragraph on page 5.7-152:

The oak woodlands in western portions of the Project site may provide temporary roost sites for individual Townsend's big-eared bats. Maternity roosts are less likely due to the typically small size of tree cavities, but may occur. Potential foraging habitat is expected to be limited to edge habitats along streams and areas adjacent to and within the oak woodlands in western portions of the Project site outside the Project's impact footprint; therefore, Project implementation is not expected to impact the Townsend's big-eared bat and no mitigation is required.

The second paragraph on page 5.7-152 is hereby revised as follows:

This loss is small relative to the amount of foraging habitat available to these two species elsewhere in the region; therefore, the loss of potential foraging habitat for the pallid bat and western mastiff bat is considered to be adverse but less than significant and no mitigation is required. Similarly, regional bat populations in general would be impacted by the Project due to loss of foraging grounds and some suitable roosting sites. These losses represent a relatively small percentage of the total regional foraging and roosting opportunities, and regional bat populations would not be reduced to below self-sustaining levels. Furthermore, the Project's approximate 27,000-acre Mitigation Preserve provides long term sustainable resources for regional populations. Therefore, Project impacts on bat species in general is considered less than significant. The loss of individual pallid bats, however, may be considered significant under Section 15380 of the State CEQA Guidelines. Implementation of ~~MM 7-3 for biological monitoring during construction, MM 7-4 for clear demarcation of disturbance limits, and~~ MM 7-9 for pre-construction bat surveys and minimization and avoidance measures ~~are~~ is recommended to avoid taking of roosting individuals that may be present within the Project's impact footprint.

The first sentence of the third paragraph on page 5.7-153 is hereby revised as follows:

Although not classified as a special status species (CDFW 2017b), the relatively small population of reintroduced pronghorn antelope on the Project site is

considered of interest due to limited numbers and historical presence in the region.

The third sentence of the third paragraph on page 5.7-153 is hereby revised as follows:

Project implementation would reduce the amount of available foraging habitat and some opportunities for crossing SR-138 for this population.

The fifth full sentence in the first partial paragraph on page 5.7-160 is hereby revised as follows:

Implementation of MM 7-10 would reduce these impacts to less than significant levels through preservation of ~~14,375~~ 14,908 acres of on-site and off-site grasslands.

The first sentence of the first full paragraph on page 5.7-160 is hereby revised as follows:

The grassland mitigation is based on site-specific characteristics including, for example, the existence of native grasslands in the ~~27,408~~ 43,079-acre on-site (unimpacted~~/~~ SEA lands) and off-site preserve areas.

The fourth sentence of the second full paragraph on page 5.7-160 is hereby revised as follows:

Specifically, the Project proposes to preserve ~~14,375~~ 14,908 acres of grasslands within the ~~27,404~~ 43,079-acre on-site (unimpacted~~/~~ SEA lands) and off-site mitigation preserve, which is part of a larger 240,000-acre conservation area (including dedication and acquisition areas).

The last partial paragraph on page 5.7-162 is hereby revised as follows:

As shown in the table above and illustrated on Exhibit 5.7-13, Jurisdictional Drainage Feature Impacts, impacts to USACE-regulated "waters of the U.S." total 0.04 acre. Exhibit 5.7-13 has been modified to increase the size of features to facilitate viewing ability, and a footnote has been revised to indicate that some features appear larger than they really are.

The following paragraph is hereby added on page 5.7-163 after the paragraph starting with "Additionally" and before the paragraph starting with "Impacts" near the bottom of the page:

The Project's drainage masterplan is designed to ensure, as required by State mandate, that the quantity and quality of water leaving the Project is not greater than the pre-Project condition at the point of discharge. Additionally, although the Project results in reduced flows in some downstream areas, they are either very minor, such as in Oso Creek, or there are no aquatic/riparian resources supported downstream, such as the eastern drainages. Lastly, the timing of flows, both seasonally as well as pooling and flowing durations, are

not expected to defer substantially from pre-project conditions, as further addressed in Section 5.2, Hydrology and Flood, of the Draft EIR. As a result, off-site downstream drainages as well as the associated habitats and plant and wildlife species are not expected to be impacted to any measurable degree. Furthermore, those drainages that are proposed for a continuous series of in-channel hydraulic measures are considered impacted in their entirety.

The following text is hereby added immediately following the first sentence of the last, partial paragraph on page 5.7-163:

Impacts to the drainages, wetlands, and riparian vegetation on the Project are considered significant due to their protected status. It is noted this analysis considers graded/reengineered drainages as a permanent loss in terms of biological resource impacts, even though some functions may be restored in the post-Project drainage condition. Exhibit B.4-9, On-Site Open Space Areas, has been prepared to illustrate where most of the existing drainage corridors are retained as the general location of re-engineered drainages.

The following paragraph is hereby added after the last paragraph on page 5.7-166:

During grading and construction, implementation of environmentally safe dust control agents may be used on unpaved access roads that connect paved/developed roadways in completed phases of the Project to areas of disturbance from grading. Although the application of dust control agents would occur on disturbed access roads that would be devoid of vegetation, some wildlife may enter the construction area. Due to the lack of cover and forage, the frequency and number of animals is expected to be minimal and limited to more mobile species such as birds, large mammals, and some insects. Because MM 3-2 requires that the use of dust control agents be environmentally safe, and because the use of graded/disturbed construction areas by wildlife is anticipated to be minimal, impacts to wildlife would be less than significant.

The following text is hereby added immediately following the second sentence of the first full paragraph on page 5.7-172:

The SEA would remain intact, and the Project would not result in any fragmentation of this area (see Exhibit 5.7-15, Significant Ecological Areas). It is noted that under the Antelope Valley Area Plan, the SEA boundaries grew considerably, and in response, the Project disturbance areas shrunk in order to conform to SEA boundaries and West Economic Opportunity Areas. Exhibit B.4-48, Historical Disturbance Limits Comparison, illustrates the change in the disturbance footprint in the past and as currently proposed.

The following text is hereby inserted at the end of Section 5.7.6, Environmental Impacts, on page 5.7-173.

Oso Canyon

NAP

NAP

Quail Lake

Tentrock Canyon

- Project Boundary
- Impact Area
- CDFW/RWQCB Jurisdictional Drainage Feature
- RWQCB Jurisdictional Isolated Water Feature
- USACE Jurisdictional Drainage Feature
- Non-Jurisdictional Ponded Feature
- **NAP** Not A Part

Note: The drainage features displayed here are not represented at their actual size, they have been modified to be visible at the scale of this map.

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Jurisdictional Drainage Feature Impacts

Exhibit 5.7-13

Centennial Project

N W E S

3,000 1,500 0 3,000

Feet

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Quail Lake

138

Old Ridge Route

Current Disturbance Limits - 7,716 acres

Previous Disturbance Limits - 8,315 acres (May, 2008)

Aerial Source: ESRI, NAIP 2014

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Historical Disturbance Limits Comparison

Centennial Project

Exhibit Response B.4-48

N W E S

3,000 1,500 0 3,000

Feet

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Impact of Climate Change on Biological Resources

Climate change is projected to be a powerful stressor, posing a risk of abrupt and irreversible regional-scale change in the composition, structure, and function of terrestrial, freshwater, and marine ecosystems (IPCC 2014). It may affect air temperature, precipitation, snowpack, streamflow, water availability, fire, and vegetation. In addition, marine environments may experience rising ocean temperature, sea level rise, ocean acidification, and upwelling. While climate models attempt to predict future changes, some of these results are already observable. The table below provides a list of observed impacts in North American attributed to climate change since the IPCC's fourth Assessment Report, published in 2007.

Observed Impacts in North America Attributed to Climate Change

Observed Impact	Confidence	Contribution from Climate Change
Shrinkage of glaciers	high	major
Decreasing amount of water in spring snowpack	high	major
Shift to earlier peak flow in snow-dominated rivers	high	major
Increased runoff	medium	minor
Phenology changes and species distribution shifts upward in elevation and northward	medium	major
Increased wildlife frequency in subarctic conifer forests and tundra	medium	major
Regional increases in tree mortality and insect infestations in forests	low	minor
Increase in wildfire activity, fire frequency and duration, and burnt area in forests	medium	minor
Changes in mussel beds along the west coast	high	major
Changed migration and survival of salmon in the northeast Pacific	high	major
Confidence in the validity of a finding is based on the type, amount, quality, and consistency of evidence (e.g., data, mechanistic understanding, theory, models, expert judgment) and the degree of agreement. Source: IPCC 2014		

These effects on the environment due to climate change may have a variety of direct and indirect effects on plant and wildlife species. Climate change, especially in conjunction with other stressors such as habitat modification, pollution, and invasive species, presents an increased risk of extinction for both terrestrial and aquatic species. This risk is expected to increase with both the magnitude and rate of climate change (IPCC 2014).

Statewide modelling predicts that alpine/subalpine forest, evergreen conifer forest cover, mixed evergreen woodland, and shrubland will decline while mixed evergreen forest and grassland are predicted to increase (Lenihan 2008). In southwestern California, the area of chaparral/coastal sage scrub is

projected to decrease by 38 to 44 percent and the area of grassland is projected to increase by 345 to 390 percent by 2070 (PRBO 2011). Sea level rise may affect coastal and estuarine habitats, potentially leading to the inundation and loss of tidal marshes (PRBO 2011).

Changes in vegetation communities can be exacerbated by changes in fire severity and frequency. The effect of climate change on fire in California is complex, with different climate models predicting either a decrease or increase in the probability of large fires in southern California. Drier conditions in one model projected a reduced fire risk while a wetter climate model predicted in increase in the probability of large fires (PRBO 2011). Fire may slow or limit the encroachment of woody vegetation into grasslands under less dry conditions, but hasten the transition from woody vegetation to grassland under drier conditions (Lenihan 2008). Fires may impact species through direct mortality and indirectly by modifying vegetation structure and composition.

In response to climate change's effects on the environment, terrestrial plant and wildlife species shift their geographic ranges and seasonal activities. This can lead to changing interactions among species, including competition and predator-prey dynamics. Species are expected to generally relocate upward in elevation and to higher latitudes; however, the response varies across species, with some are projected to move to lower elevations (Langham et al. 2015). National Audubon Society (2015) modeling predicts that 314 of the 588 North American bird species studied will lose more than 50 percent of their current geographic range by 2080. Warming has also been found to cause shifts in the abundance, geographic distribution, migration patterns, and timing of seasonal activities of marine species. This has been observed over recent decades and is projected to continue.

The second paragraph of MM 7-1 on page 5.7-174 is hereby revised as follows:

The Project Applicant shall prepare and implement a Special Status Plant Species Restoration Plan covering the California androsace, crownscale, round-leaved filaree, Mojave spineflower, sylvan scorzonella, and adobe yampah that shall specify the following: (1) identification of and suitability analyses for the enhancement area; (2) procedures for the collection and temporary storage of seed (all available seed from every impacted occurrence shall be collected); (~~2~~ 3) planting procedures, including soil preparation and irrigation; (~~3~~ 4) a schedule and action plan to maintain and monitor enhanced, restored, and/or created populations; (4 5) methods to control plant densities (of competing plants) to promote the establishment of California androsace, crownscale, round-leaved filaree, Mojave spineflower, sylvan scorzonella, and adobe yampah; ~~and~~ (~~5~~ 6) a list of County-approved success criteria (e.g., germination rates, growth, plant cover) to compare to the density of existing populations; (7) for creation or enhancement area(s), monitoring to confirm

> successful implementation of the 2:1 mitigation ratio; and (8) contingency measures to further create or enhance plantings in creation or enhancement areas where monitoring results do not show successful 2:1 mitigation, which shall remain in effect until such time as the 2:1 mitigation ratio has been achieved. The Project Applicant shall develop the Special Status Plant Species Restoration Plan and the County and CDFW shall approve it prior to any vegetation clearing or grading on the site. ~~Adoption of this plan shall be used as the performance standard. An overview of the plan objectives is provided in the Biological Resource Mitigation Program to be submitted and approved by the County prior to issuance of grading permits.~~

The last sentence in the fourth paragraph of MM 7-1 on page 5.7-174 is hereby revised as follows:

> These existing areas shall be (in order of priority) preserved, enhanced, expanded, ~~or~~ restored, or created ~~or new areas shall be created in suitable habitat~~ in order to compensate at a 2:1 ratio for the thousands of individual special status plants that will be lost due to the Project.

The following text is hereby added at the end of the second to last paragraph of MM 7-1 on page 5.7-175:

> Additional protective measures are included in MM 7-17.

The following further edit was identified subsequent to publication of the Final EIR and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors. No further edits have been made to this text. The first two paragraphs of MM 7-1, which start on page 5.7-173, are hereby revised as follows:

> Prior to issuance of grading permits in areas of the Project site that may disturb California androsace, crownscale, round-leaved filaree, Mojave spineflower, sylvan scorzonella, or adobe yampah populations, focused surveys of mitigation lands shall have been completed by a qualified biologist(s) to confirm compliance with the 2:1 mitigation ratio for the California androsace, crownscale, round-leaved filaree, Mojave spineflower, sylvan scorzonella, and adobe yampah. Surveys will be conducted in accordance with current California Native Plant Society (CNPS) protocol and will occur during the appropriate time of year. The Survey Report shall be submitted to the County and the California Department of Fish and Wildlife (CDFW) for their review. In addition to rare plant species populations that have previously been found in the Mitigation Preserve, newly detected populations will be preserved and managed for long-term preservation. These populations will provide baseline information for management efforts described below and will provide information to help determine habitat suitability in areas where propagation of rare plants may be considered.

The Project Applicant shall prepare and implement a Special Status Plant Species Restoration Plan covering the California androsace, crownscale, round-leaved filaree, Mojave spineflower, sylvan scorzonella, and adobe yampah that shall specify the following: (1) identification of and suitability analyses for the enhancement area; (2) procedures for the collection and temporary storage of seed (all available seed from every impacted occurrence shall be collected); (3) planting procedures, including soil preparation and irrigation; (4) a schedule and action plan to maintain and monitor enhanced, restored, and/or created populations; (5) methods to control plant densities (of competing plants) to promote the establishment of California androsace, crownscale, round-leaved filaree, Mojave spineflower, sylvan scorzonella, and adobe yampah; (6) a list of County-approved success criteria (e.g., germination rates, growth, plant cover) to compare to the density of existing populations; (7) for creation or enhancement area(s), monitoring to confirm successful implementation of the 2:1 mitigation ratio; and (8) contingency measures to further create or enhance plantings in creation or enhancement areas where monitoring results do not show successful 2:1 mitigation, which shall remain in effect until such time as the 2:1 mitigation ratio has been achieved and maintained for one full growing season. The Project Applicant shall develop the Special Status Plant Species Restoration Plan and the County and CDFW shall approve it prior to any vegetation clearing or grading on the site.

MM 7-2 on pages 5.7-175 and 5.7-176 is hereby revised as follows:

MM 7-2 All grubbing/grading within a phase of construction shall be scheduled and implemented to facilitate the voluntary movement of localized wildlife towards intact adjacent habitat. Islands of habitat should not be created during site disturbance unless they are to be retained as un-impacted following the Project buildout.

A pre-construction/grading survey of all areas proposed for construction/grading activities that contain potentially suitable habitat for silvery legless lizard, coast horned lizard, and two-striped garter snake~~, and American badger~~ shall be conducted by a qualified Biologist. Surveys will consist of 1 pass-through by a qualified Wildlife Biologist walking 50-meter belt transects across areas to be impacted while visually searching for the species listed above. Surveys will be conducted no more than three days prior to the disturbance of the surveyed area. If any of these species or other wildlife species that can be easily moved are observed within the construction/grading zone, the Biologist (who must have a valid California Scientific Collecting Permit) shall relocate them to a suitable area outside the construction zone. Suitable areas would include appropriate habitats within the proposed open space areas in the

northwestern portion of the Project site and would be identified in a Wildlife Relocation Plan (described below) prior to surveys but before construction begins.

Areas adjacent to Quail Lake and on the Project site potentially supporting western pond turtle breeding habitat shall not be disturbed during the breeding season for the turtles (April through August). No Project activities shall occur within ~~300~~ 400 feet from the edge of Quail Lake, due to potential for nesting in those areas.

Prior to issuance of grading or building permit, the Project Proponent shall conduct appropriate burrowing owl pre-construction surveys and avoidance and mitigation measures as identified below.

Burrowing Owl Pre-Construction Surveys

The project biologist shall conduct pre-construction take-avoidance surveys no more than 30 days prior to ground-disturbing activities within each construction area. Focused burrowing owl surveys shall be conducted in accordance with the CDFW Staff Report on Burrowing Owl Mitigation (March 2012). Breeding season surveys shall include at least four survey passes completed between February 15 and July 15, with at least one visit between February 15 and April 15, and a minimum of three survey visits (at least 3 weeks apart) between April 15 and July 15, including at least one visit after June 15. Non-breeding season surveys shall include at least four visits spread evenly throughout the non-breeding season. The surveys shall be conducted in suitable burrowing owl habitat within 150 meters (492 feet) of the project footprint. Surveys shall be conducted by walking 20-meter transects. Because burrowing owls can recolonize a site after a few days, time lapses between project activities trigger subsequent take avoidance surveys, including, but not limited to an additional survey within 24 hours of ground-disturbing activities. Once surveys are completed, the project biologist shall prepare a survey report on the survey methods and results.

Burrowing Owl Avoidance and Mitigation Measures

Submit for DRP and CDFW approval and subsequently implement a Burrowing Owl Exclusion Plan, which includes four avoidance and relocation strategy tiers and associated mitigation requirements set forth in the CDFW Staff Report

on Burrowing Owl Mitigation (CDFG 2012): Tier 1 – Avoidance Buffers; Tier 2 – Passive Relocation; Tier 3 – Prevention of Recolonization of Development Areas; and Tier 4 – Active Relocation (Optional). Site monitoring shall be required prior to, during, and after exclusions of burrowing owls from their burrows. Excluded burrowing owls shall be monitored and documented using artificial or natural borrows on adjoining Mitigation Preserve lands or other open space.

Avoidance buffers shall be established in accordance with the buffer distances described in the CDFW Staff Report on Burrowing Owl Mitigation (CDFG 2012), which range from 50 to 500 meters, depending on the season and level of disturbance. The buffers may be reduced, but only after consultation with and approval from CDFW.

~~Pre-construction burrowing owl and Swainson's hawk surveys shall be conducted in all potentially suitable habitat areas prior to initial site preparation. Methods employed shall be consistent with standard and appropriate protocols for both species within the appropriate season of the year prior to construction. Burrowing owl pre-construction surveys shall be conducted prior to the start of construction/ground-breaking activities. Surveys will be conducted following the California Department of Fish and Wildlife's (CDFW's) 2012 burrowing owl survey protocol. These surveys shall be conducted weekly beginning 30 days prior to the start of construction with the final survey occurring 1 day prior to construction.~~

~~If pre-construction surveys locate an active Swainson's hawk nest on the Project site, then no construction activities will occur within ½ mile of the nest between March 1 and September 15. Furthermore, a Swainson's hawk Monitoring and Mitigation Plan shall be prepared within 90 days after locating an active Swainson's hawk nest in consultation with the County and the CDFW.~~

Prior to issuance of grading or building permit, the Project Proponent shall conduct appropriate Swainson's hawk pre-construction surveys and avoidance and mitigation measures as identified below.

Swainson's hawk pre-construction surveys

Pre-construction surveys for Swainson's hawk shall be conducted during the two survey periods prior to

construction by the Project Lead Biologist following the survey methods developed by the Swainson's Hawk Technical Advisory Committee (SWHA TAC 2000). These methods include surveying for active nests within a 0.5-mile radius of all Project activities prior to construction activities.

Swainson's hawk avoidance measures

If active Swainson's hawk nests (defined as nests used during one or more of the last 5 years) are found during these surveys, the Project Proponent shall utilize the CDFW *Staff Report Regarding Mitigation for Impacts to Swainson's Hawks* (Buteo swainsoni) *in the Central Valley of California* for addressing the species as modified below. During initial ground disturbance construction, no intensive disturbances (e.g., heavy equipment operation associated with construction, use of cranes or draglines, new rock-crushing activities) or other Project-related activities that may cause nest abandonment or forced fledging shall occur within 0.5-mile of an active nest between January 1 and September 15, unless take authorization is obtained and provides otherwise.

The buffer zone may be decreased to 0.25-mile around nests for subsequent construction (i.e., in areas where disturbance—such as heavy equipment operation associated with construction, use of cranes or draglines, new rock-crushing activities—is not a normal occurrence during the nesting season). Active nest trees (where the nest is intact and has been used in the last 5 years) shall not be removed unless there is no practicable way of avoiding them. Encroachment of construction within the 0.5-mile buffer and removal of active nesting trees shall only be undertaken subject to consultation with CDFW and issuance of If an active nest tree must be removed, a California Fish and Game Code Section 2081 Incidental Take Permit, and associated conditions, if any are required. The tree removal period shall be limited to between October 1 and December 31.

Swainson's hawk monitoring during construction

If construction or other Project-related activities that may cause nest abandonment or forced fledging are necessary within the buffer zone, prior acquisition of an Incidental Take Permit shall be required. Monitoring of the nest site by

the Project Lead Biologist is required to determine whether the nest is abandoned. If the nest is abandoned and if the nestlings are still alive, the master developer shall fund the recovery and hacking (i.e., the controlled release of captive-reared young) of the nestling(s). Existing activities such as agricultural activities, commuter traffic, and routine facility maintenance activities within 0.25-mile of an active nest shall not be prohibited.

The Wildlife Relocation Plan shall describe: (1) all areas potentially suitable for receiving relocated animals and (2) methods that shall be used in the relocation process. Methods shall include appropriate species-specific handling techniques, including adherence to the Amphibian Task Force Fieldwork Code of Practice, ~~and appropriate hygienic methods~~ to prevent the spread of pathogens. The Plan shall also identify thresholds for the number of individuals of each species that shall be allowed to be placed in any particular area. The Wildlife Relocation Plan shall be prepared by a qualified biologist ~~the Project Applicant/Developer~~ and submitted to the CDFW prior to Project implementation for review and comment. The plan shall be approved by the County prior to issuance of the first grading permit. County and CDFW approval of the Plan shall indicate that the performance standards have been met. The Plan shall be implemented prior to grading an area for which the pre-construction survey identified one or more of these species. Although, implementation of the mitigation plan may have some impact on wildlife, it is expected to be negligible relative to the project as a whole and expected to me a net positive effect as required.

For the American badger specifically, the following pre-construction survey and avoidance measure protocols shall be implemented.

American Badger Pre-Construction Surveys and Avoidance Conditions

Pre-construction winter/non-natal surveys for American badger shall be required for any construction activities commencing between November 1 and February 15. Surveys shall be conducted within potentially suitable habitat, within 100 feet of disturbance zones, no more than 14 days prior to construction activities to determine whether American badger winter dens are present within disturbance zone or within 100 feet of the disturbance zone

boundary. If Project activities are delayed or suspended for more than 14 days, the project-construction surveys shall be repeated.

If an American badger winter or non-natal den is occupied within the disturbance zone or within 100 feet of the disturbance zone, then the den location shall be clearly marked with fencing or flagging, in a manner that does not isolate the badger from intact adjacent habitat or prevent the badger from accessing the den, to avoid inadvertent impacts on the den. The den shall be monitored by a qualified biologist to confirm normal activities during construction. If it is not practicable to avoid the wintering or non-natal den during construction activities, CDFW will be contacted. Construction activities shall be allowed to proceed when the den is vacated.

Pre-construction natal den surveys for American badger shall be required for any construction activities commencing between March 15 and July 31. Pre-construction surveys shall be conducted within potentially suitable habitat, within 200 feet of the disturbance zone, by the project biologist, no earlier than 14 days prior to ground-disturbing construction activities to determine whether American badger natal dens are present within the project disturbance zone or within 200 feet of the disturbance zone.

If active natal dens are located within these areas during pre-construction surveys, construction activities shall be postponed. If natal dens are detected during construction, construction activities shall be halted within 200 feet of the natal den. This buffer may be reduced based on the location of the den or type of construction activity, based on the direction of the project biologist and CDFW has agreed in writing. Construction activities shall not preclude the ability of the documented badgers to disperse to on-site open space or off-site habitat when the natal den is vacated (i.e., habitat suitable for dispersal must be maintained until dispersal occurs). Construction will be postponed or halted in these areas until it is determined by the project biologist that the young are no longer dependent on the natal den. To avoid inadvertent impacts during construction and to ensure that construction activities are at least 200 feet from active natal dens, any active natal dens within the survey area shall be clearly marked with fencing or flagging in a manner that does not isolate the badger from sufficient intact adjacent

habitat, prevent the badger from accessing the den, or inhibiting normal behavioral activities (e.g., foraging and dispersing from the site) by the mother and pups. Construction activities shall be allowed to proceed when the den is vacated.

Pre-construction surveys for the ring-tailed cat shall be conducted throughout the Project disturbance area in the appropriate season within the year prior to disturbance. If results are negative, Project activities will proceed without further restrictions in regard to this species. If detected, the applicant shall consult with CDFW and modify Project activities at that time to ensure complete avoidance and no take of ring-tailed cat will occur.

The second sentence of MM 7-3 on page 5.7-176 is hereby revised as follows:

> The Biologist shall relocate silvery legless lizard, coast horned lizard, two-striped garter snake~~, American badger,~~ and any other special status wildlife species that can be moved which would otherwise be destroyed or adversely affected by construction and/or site-preparation activities.

The last paragraph in MM 7-3 on page 5.7-177 of the Draft EIR is modified to clarify as follows:

> In addition, a Biological Monitor will be on site during all initial vegetation removal and will employ salvage methods to minimize direct impacts to common wildlife species. Where feasible, the biological monitor will attempt to ensure wildlife are out of potential direct impact. ~~If a wildlife species is in harm's way and has not moved on its own, the Biologist will attempt to scare them away from the area. If wildlife does not move, and where feasible, the wildlife species will be relocated to suitable habitat.~~

The following text is hereby added after the final paragraph of MM 7-3 on page 5.7-177:

In order to further reduce impacts to special status wildlife, restrictions shall be placed on the Contractor. These restrictions are related to hours of operation and blasting requirements. Responsibilities of the Construction Contractor shall include:

a. All Project-related activities during construction shall be restricted to daylight hours. Night work and associated lighting shall not be permitted during and night work shall be prohibited throughout the Project site to reduce the potential adverse effect on special status species.

b. Vehicle and equipment access within the Project site shall be restricted to existing roads and overland travel shall be minimized and confined to areas where development will occur to the greatest extent feasible.

c. If blasting is required, applicable federal, State, and local requirements would be observed, and any necessary permits and authorizations would be obtained.

d. Best Management Practices Guidelines developed by the Institute of Makers of Explosives (IME) would be implemented.

e. To avoid impacts to special-status-biological resources, blasting would occur during the rough-grading activities of construction phase of the Project only between the hours of 10:00 am and 4:00 pm.

f. To avoid potential affects to birds, blasting would occur outside the nesting bird season (i.e. blasting shall occur only between September 15 and January 1). No blasting shall occur within 1 mile of the winter perch for bald eagle during the winter season (October 15 to March 15).

g. Prior to blasting, a blasting monitoring team including the Project biologist and one acoustician would be formed. The Project biologist would assess and provide guidance related to the criteria for impact on any nearby noise sensitive species. The acoustician should have a minimum of five years of acoustical measurement experience and would be responsible for the blast noise and vibration measurements.

h. Blasts should be measured with a calibrated Type 1 sound level meter set to the fast or impulse integration response. If possible, the low frequency cut off should be set as low as possible, ideally 2 Hz or lower. Peak sound levels should be measured at a known distance from blast between the blast site and the noise sensitive species habitat (identified by the Project biologist). If the Project biologist sees fit, the low frequency cut off requirements may be waived or adjusted to address the sensitive species in the area. If measured peak levels exceed the criteria, blasts shall be altered in a way to reduce the impact. Such mitigation efforts may include: Reducing the explosive material,

altering the packing and placement of the explosive material, or changing the location of the blasting efforts.

i. The biologist has the authority to stop blasting efforts or advise the blast team on the method of mitigation.

The following further edit was identified subsequent to publication of the Final EIR and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors. No further edits have been made to this text. The following text of MM 7-3 is hereby revised:

In order to further reduce impacts to special status wildlife, restrictions shall be placed on the Contractor. These restrictions are related to hours of operation and blasting requirements. Responsibilities of the Construction Contractor shall include:

a. All Project-related activities during construction shall be restricted to daylight hours. Night work and associated lighting ~~shall not be permitted during and night work~~ shall be prohibited throughout the Project site to reduce the potential adverse effect on special status species.

The first sentence of MM 7-4 on page 5.7-177 is hereby revised as follows:

All open space preservation areas adjacent to active construction sites shall be denoted with wildlife-friendly fencing installed and maintained during construction to ensure that construction activities remain within the development footprint.

MM 7-5 on page 5.7-177 is hereby revised as follows:

MM 7-5 Within the year prior to, and within the appropriate season, focused surveys for the following special status species shall be repeated: arroyo toad, Tehachapi slender salamander, California red-legged frog (concurrent with two-striped garter snake and western pond turtle focused surveys), western spadefoot, mountain plover, southwestern willow flycatcher, western yellow-billed cuckoo, and least Bell's vireo. Surveys shall be conducted within all areas of potentially suitable habitat and in accordance with the approved CDFW or U.S. Fish and Wildlife Species (USFWS) protocol for that species.

Western spadefoot pre-constructions surveys and avoidance measures shall be implemented as follows:

Western spadefoot pre-construction surveys

Prior to approval of a Grading Permit, the applicant shall provide to the County evidence verified by the Project

Biologist that the area proposed to be graded, including a 300-foot buffer area, has been surveyed for suitable western spadefoot breeding habitat. If suitable breeding habitat is identified, the verification shall include a map of the delineated areas, including the 300-foot buffer, which are to be avoided. Surveys shall be conducted within 60 days prior to construction during a time of year when the species can be detected above ground at suitable breeding sites. Suitable breeding habitat is defined as areas of temporarily ponded water, including within creeks and within the valley floor uplands. Suitable breeding sites should support ponded water for at least three weeks. To ensure that diseases are not conveyed between work sites by the Project Biologist or his or her assistants, the fieldwork code of practice developed by the Declining Amphibian Populations Task Force will be followed at all times.

Western spadefoot avoidance measures

If western spadefoot is detected within the Project footprint, measure "(i)" shall be implemented with appropriate review and concurrence from CDFW. If western spadefoot is detected outside the Project footprint, but within 300 feet of the Project footprint boundary, measure "(ii)" shall be implemented. Prior to implementation of avoidance measures, the Project Biologist shall confer with CDFW.

If western spadefoot is detected (including egg masses and larvae) in water within the Project footprint and cannot be permanently avoided (e.g., by placing a resource avoidance area over the site), suitable breeding habitat shall be created within suitable natural sites in open space outside of the Project footprint under the direction of the Project Biologist. The amount of occupied breeding habitat to be impacted by the Project shall be replaced at a 2:1 ratio. The habitat creation location shall be in suitable habitat within on-site open space and as far away as feasible from residential and commercial development and roads. The created breeding habitat shall be designed such that it supports standing water for no longer than three months following winter rains so that aquatic predators (e.g., fish, bullfrogs, and crayfish) cannot become established. Terrestrial habitat surrounding the proposed relocation site shall be as similar in type, aspect, and density to the location of the impacted breeding site as feasible. No site preparation or construction activities shall be permitted within 300 feet of the vicinity of

the impacted breeding site until the design and construction of the pool habitat in preserved areas of the site have been completed and all detected western spadefoot tadpoles, egg masses, and adults are moved to the created breeding habitat.

The Project Biologist shall monitor the relocation site for a cumulative total of five years in which environmental conditions are conducive for western spadefoots to successfully complete the breeding cycle (i.e., adequate rain for pools to hold water for a sufficient period). Monitoring shall be conducted during and immediately following peak breeding season such that surveys can be conducted for adults as well as for egg masses, larval, and metamorphic western spadefoot. Success criteria for the monitoring program shall include verifiable evidence of western spadefoot reproduction at the relocation site during five years with suitable breeding conditions.

If western spadefoot is detected (including egg masses and larvae) in water within 300 feet of the Project footprint boundary, but not within the Project footprint itself, an exclusion fence shall be constructed along the Project boundary between the construction footprint and the occupied breeding site to prevent western spadefoots from moving into and aestivating within the construction footprint. The exclusion fencing shall consist of 16-inch metal flashing, or an equivalent material, which shall be buried at least 6 inches below the ground surface, extending at least 8 inches above the ground. The fencing shall cover a sufficient length of the boundary to inhibit western spadefoots from entering the Project footprint without entrapping aestivating western spadefoot. The necessary length and appropriate location of the exclusion fence relative to the occupied breeding site shall be determined by the Project Biologist.

No construction activities involving heavy equipment generating noise, ground vibration, and/or dust shall be allowed within 300 feet of occupied breeding sites until western spadefoots have metamorphized and are no longer present in the breeding pool, as determined by the Project Biologist. Acceptable Project activities (e.g., quiet and/or low impact activities) within 300 feet of the occupied breeding site shall be allowed at the discretion of the Project Biologist.

Preconstruction surveys and avoidance measures for the least Bell's vireo and southwestern willow flycatcher, specifically shall be as follows:

Least Bell's vireo and southwestern willow flycatcher pre-construction surveys

In the season prior to construction, within all potentially suitable habitat within 0.5 mile of proposed construction areas, the Project Biologist shall conduct focused surveys for least Bell's vireo and southwestern willow flycatcher. Least Bell's vireo surveys will follow the currently accepted Least Bell's Vireo Survey Guidelines (USFWS 2001). Surveys for southwestern willow flycatcher will be conducted using the methods outlined in A Natural History Summary and Survey Protocol for the Southwestern Willow Flycatcher, issued by the U.S. Geological Survey (USGS) and U.S. Department of the Interior and approved by the U.S. Fish and Wildlife Service (USFWS) (Sogge et al. 2010). Surveys for least Bell's vireo and southwestern willow flycatcher will be conducted concurrently.

Least Bell's vireo and southwestern willow flycatcher avoidance measures

If active nests are found, clearing and construction within 0.5 mile of the nest shall be postponed or halted until the nest is vacated and juveniles have fledged, as determined by the Project Biologist, and there is no evidence of a second attempt at nesting. If no active nests are observed, construction may proceed. If active nests are found, work may proceed provided that construction activity is located at least 0.5 mile from active nests (or as authorized through take permits). This buffer may be adjusted provided noise levels do not exceed 60 dBA hourly L_{eq} at the edge of the nest site as determined by a qualified biologist in coordination with a qualified acoustician.

If the noise meets or exceeds the 60 dBA L_{eq} threshold, or if the biologist determines that the construction activities are disturbing nesting activities, the biologist shall have the authority to halt the construction and shall devise methods to reduce the noise and/or disturbance in the vicinity. This may include methods such as, but not limited to, turning off vehicle engines and other equipment whenever possible to reduce noise, installing a protective noise barrier between

the nest site and the construction activities, and working in other areas until the young have fledged. If noise levels still exceed 60 dBA L_{eq} hourly at the edge of nesting territories and/or a no-construction buffer cannot be maintained, construction shall be deferred in that area until the nestlings have fledged. All active nests shall be monitored on a weekly basis until the nestlings fledge. The qualified biologist shall be responsible for documenting the results of the surveys and the ongoing monitoring and for reporting these results to CDFW and USFWS.

MM 7-6 on pages 5.7-177 and 5.7-178 is hereby be revised as follows:

MM 7-6 Construction Monitoring - The Project Applicant~~/Developer~~ shall retain a ~~qualified~~ CDFW/USFWS-approved "Authorized Biologist ~~with knowledge of California condors~~," to ~~monitor~~ be on-call during all construction activities. If condors are observed foraging or landing in the Project area~~. The resumes of the proposed Biologist(s) will be provided to the CDFW for concurrence. This Biologist(s) will be referred to as the "Authorized Biologist" hereinafter. During clearing and grubbing of construction areas~~, the Authorized Biologist shall ~~be present at all times. During mass grading, construction sites shall be monitored on a daily basis, and the Authorized Biologist will~~ have the authority to stop all construction activities until appropriate corrective measures have been ~~completed~~ implemented. If condors are observed landing in the Project area, the Applicant shall avoid further construction within 500 feet of the sighting until the animals have left the area, or as otherwise authorized by CDFW and USFWS. If the condors are nesting within 0.5-mile of any Project area, no construction activities shall occur within this 0.5-mile buffer until the condors leave, or as otherwise directed by CDFW and USFWS. All condor sightings in the Project area ~~will~~ shall be reported to CDFW and USFWS within 24 hours of the sighting.

~~To further protect California condors potentially foraging in the Project area over the long term from negative interactions with humans and/or artificial structures, the~~ Cattle Carcass Relocation - The Project Applicant~~/Developer~~ shall remove dead cattle that are found ~~or reported~~ within 1,000 feet of the boundary of a residential or commercial development within 24 hours. ~~Dead cattle shall be relocated to a predetermined location.~~ The Approved Biologist will select locations ~~where carcasses shall be placed shall be~~ a minimum of 1,000 feet from ~~a~~ development ~~area boundary. Appropriate locations~~ areas for

~~transfer~~ relocation of carcasses ~~include open grasslands and oak/grassland areas where condors can readily detect carcasses and easily land and take off without encountering physical obstacles such as powerlines and other utility structures~~. The proposed locations would be ~~selected and~~ approved by the CDFW and USFWS. ~~Pursuant to this measure, a~~ A telephone number for reporting dead cattle shall be provided ~~and actively maintained. Any cattle carcasses transferred to the relocation areas shall be reported to the USFWS Condor Group~~ by the Applicant.

Utility Hazards - All surfaces on new antennae and phone/utility towers shall be designed, installed, and operated with anti-perching devices in conformance with Avian Power Line Interaction Committee standards to deter California condors and other raptors from perching. Whenever possible, utility towers and antennae should be self-supporting (i.e. not use guy wires), and be as visible as possible (using sold panel siding or dense/wide lattice work).

Condor Educational Curriculum - The Applicant shall provide a Condor Educational Curriculum that includes the life history of the California condor, how to identify condors, TRC hunting rules and regulations, prohibited behaviors related to condors such as hunting with lead ammunition, and the legal consequences of inadvertently or otherwise illegally shooting or harming California condors. The information will also identify types of microtrash that could be ingested by adult breeding condors and describe measures to eliminate microtrash and provide information on how to report roadkill for removal. In addition, these rules, regulations, and prohibitions shall be listed within CC&Rs.

Microtrash - During construction, the ~~area~~ Applicant shall ~~be~~ ensure that all Project areas are kept clean of debris ~~(e.g., cable, trash, and construction materials). The Project Applicant/Developer shall collect all~~ including microtrash and litter ~~(i.e., anything shiny, such as broken glass), vehicle fluids, and food waste from the Project area on a daily basis~~. Workers ~~shall~~ will be trained on the issue of microtrash: what constitutes microtrash, its potential effects on California condors, and how to avoid the deposition of microtrash.

In addition, the Applicant will ensure that routine community maintenance activities include regular efforts to eliminate

microtrash on and near all work sites, recreational events, roads, and adjacent open space areas.

If it is determined that condors are ingesting microtrash in the Project area, the Applicant, CDFW, and USFWS shall evaluate potential remedies to reduce, and, if possible, eliminate microtrash ingestion. Such remedies may include increased education and awareness to residents, guests, staff, and workers regarding the dangers of microtrash, increased monitoring of events and activities that are potential sources of microtrash, and more frequent collection of microtrash.

Condor Deterrent Activities - If the Authorized Biologist deems it necessary, USFWS California condor hazing methods that do not rise to the level of "Take" under the ESA (Service 2014) will be employed. Only the Authorized Biologist, with approval from the USFWS, will conduct hazing and only when such actions are warranted. If the Authorized Biologist is not immediately available, a subset of less aggressive hazing methods, such as yelling, stomping, leashed dog barking or low pressure water spray, may be used when a clear escape route for the condors is identified and upon guidance from USFWS.

Condor Tracking – The Applicant will provide the USFWS with twenty-five (25) GPS satellite tracking transmitters (total cost not to exceed $150,000.00) prior to grading plan approval. This will allow the USFWS to more quickly identify the immediate location of birds that are not moving relative to the ground, which usually indicates that an injury, illness, or death has occurred. The ability to track the movements and locations of individual condors can aid in the monitoring of the overall effectiveness of measures to minimize and mitigate the indirect impact of microtrash by locating possible areas where microtrash was ingested. It can also aide in identifying the location where condors were shot if such an incident were to occur.

The following further edit was identified subsequent to publication of the Final EIR and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors. No further edits have been made to this text. The third paragraph of MM 7-6 is hereby revised as follows:

Utility Hazards - All surfaces on new antennae and phone/utility towers shall be designed, installed, and operated with anti-perching devices in conformance with Avian Power Line Interaction Committee standards to deter California condors and other raptors from perching. Whenever possible,

utility towers and antennae should be self-supporting (i.e. not use guy wires), and be as visible as possible (using ~~sold~~ solid panel siding or dense/wide lattice work).

MM 7-7 on pages 5.7-178 and 5.7-179 is hereby revised as follows:

MM 7-7 The Project shall incorporate avoidance and additional open space buffer features for each of the two ~~this~~ known tricolored blackbird nesting areas on and adjacent to the Project site ~~area~~. Permanent impacts will be restricted to a distance of 400 feet from the nesting area excluding small impact areas associated with infrastructure and utilities along SR-138 immediately south of Quail Lake. The nesting area will be delineated by a qualified Ornithologist based on all available data (three years of site-specific data shall be used). Temporary impacts (i.e., construction noise) within a ¼ mile ~~400 feet~~ of active nesting areas shall be restricted to the non-breeding season. The breeding season for this species shall be considered April 1 through July 1. The applicant shall consult with CDFW and may obtain an Incidental Take permit if determined appropriate.

~~The Project shall include enhancement, restoration, and/or preservation of potentially suitable tricolored blackbird breeding and foraging habitat. Potentially suitable areas for enhancement and preservation include lower Oso Canyon proximate to Cement Plant Road, as well as any other created water bodies as part of the Project Drainage Plan, where feasible. Enhancement factors shall include the creation of bulrush marsh habitat or other substrate known to support breeding tricolored blackbirds; a persistent nearby standing water during the breeding season; and available adjacent foraging habitat with an appropriate food source.~~

MM 7-8 on page 5.7-179 is hereby replaced in its entirety as follows:

MM 7-8 The Project Biologist shall conduct pre-construction nesting bird surveys no earlier than seven days prior to any Project-related construction/ground disturbance activities within each construction area and a 500-foot buffer that occurs during the nesting/breeding season of special-status bird species potentially nesting on the site, with the exception of the special-status bird species addressed under separate subheadings below (including burrowing owl, golden eagle, and Swainson's hawk). The pre-construction surveys shall be conducted between January 1 and September 15, or as determined by the

Project Biologist. If construction activities are delayed for more than 14 consecutive days, the surveys shall be repeated.

The purpose of the pre-construction nesting bird surveys will be to determine whether occupied nests are present in the disturbance zone or within 500 feet of the disturbance zone boundary.

If occupied nests are found, then limits of construction to avoid occupied nests shall be established by the Project Biologist in the field with flagging, fencing, fencing, or other appropriate barriers. The following minimum no-disturbance buffers will be required: 250 feet around active non-listed passerine nests and 500 feet around active non-listed raptor nests. Construction personnel shall be instructed on the sensitivity of nest areas. Project-related activities will not occur within the no-disturbance buffers. The Project Biologist shall serve as a construction monitor during those periods when construction activities are to occur near active nest areas to avoid inadvertent impacts to these nests. The Project Biologist may adjust the 250-foot or 500-foot setback at his or her discretion depending on the species, the behavioral baseline conditions determined through passive monitoring, and the location of the nest (e.g., if the nest is well-protected in an area buffered by dense vegetation). Once a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival, construction may proceed in the setback areas. Monitoring reports shall include information regarding active nests and status of nests.

MM 7-9 on page 5.7-180 is hereby replaced in its entirety as follows:

MM 7-9 Prior to issuance of grading or building permit, the Project Proponent shall conduct appropriate pre-construction bat surveys for bat roosts for pallid bat, western mastiff bat, western red bat, Townsend's big-eared bat as identified below.

a) Pre-Construction Surveys: No earlier than one year prior to the commencement of construction activities for each construction area, a pre-construction survey shall be conducted by qualified project biologists to establish areas of roosts occupancy of special-status bats (including maternity roosts, non-maternity roosts, and winter hibernacula) are present in the Project disturbance zone and within 300 feet of the Project disturbance zone boundary. The number of required

project biologists and number of survey nights will be based on the size of the construction area to assure that the whole of the construction area can be adequately surveyed. The surveys shall consist of:

i. Two spring surveys (April through June) and two winter surveys (November through January);

ii. Each survey consists of one dusk emergence survey (start one hour before sunset and last for three hours), followed by one pre-dawn re-entry survey (start one hour before sunrise and last for two hours), and one daytime visual inspection of all potential roosting habitat in the construction area;

iii. For each survey areas, conduct all three survey types within one 24-hour period;

iv. Construction areas too large to be adequately assessed in one survey, as determined by the Project biologist, shall be divided into multiple smaller survey areas.

iv. Focus visual inspections on the identification of bat sign (i.e., individuals, guano, urine staining, corpses, feeding remains, scratch marks and bats squeaking and chattering); and

v. Use bat detectors, bat call analysis and visual observations during all dusk emergence and pre-dawn re-entry surveys.

Data collection for each survey shall include the following information:

i. Whether bats are, or have been, present at roosts on the Project site;

ii. Assemblage of species using the site for roosting;

iii. Type of roost (i.e., maternity roost, day roost, night roost, feeding perch, mating roost, satellite roost, transitional roost or winter hibernaculum);

iv. Location, ambient temperature, internal dimensions and the aspect and orientation of the roost;

v. Spatial and temporal distribution of bat roosting activity;

vi. Flight paths, exit and entrance points;

vii. Number of bats, time and duration of use observed during roost surveys;

viii. Photographs; and

ix. Identification of any survey constraints.

x. If roosts are detected during pre-construction surveys, the following avoidance measures will be implemented unless relocation and/or take is authorized under California Endangered Species Act (CESA), as required by applicable law.

b) Avoidance Measures Fencing Installation

i. For Maternity Roosts: If an active maternity roost is identified in these areas, the maternity roost will not be directly or indirectly disturbed by prohibiting clearing and grubbing adjacent to the roost site, prohibiting lighting use near the roost site where it would shine on the roost or interfere with bats entering or leaving the roost, prohibiting the bird netting and prohibiting the operation of internal combustion equipment, such as generators, pumps and vehicles within 300 feet of the roost site until the maternity roost is vacated and juveniles have fledged, as determined by the project biologist. The rearing season for native bat species in California is approximately April 1 through August 31.

ii. For Hibernacula or Non-Maternity Roosts: If non-breeding bat roosts (hibernacula or non-maternity roosts) are found within the disturbance zone, the following shall be implemented:

a. Avoid direct and indirect impacts to roosting sites by prohibiting all project-related activities within 100 feet of the roost.

b. Additionally, within 300 feet of the roost, prohibit clearing and grubbing adjacent to the roost site and lighting use near the roost site where it would shine on the roost or interfere with bats entering or leaving the roost. Prohibit the operation of internal combustion equipment, such as generators, pumps and vehicles, and the use of bird netting.

c. If avoidance of roost sites is infeasible, maintain portions of the features that provide naturalized habitat to the greatest extent possible and improve existing roost sites and/or provide new roost sites on buildings or on the Project site. Implement these measures only after consultation with CDFW.

d. New roost sites must be in place prior to the initiation of Project-related activities to allow enough time for bats to relocate.

e. Design and locate new and enhanced roost sites to be compatible with the bats' search image and habitat requirements (i.e., thermal regulation, interior size, ventilation, etc.). Design new and enhanced roost sites in consultation with CDFW.

f. Exclude bats from directly affected work areas selectively and only to the extent necessary to prevent morbidity or mortality to the colony. Use one-way bat exclusion devices, installed in a bat-safe way, to exclude bats and then use steel wool or other method to block the entrance, after the bats have gone. Exclude bats only after consultation with CDFW, at a time that is compatible with the species' normal behavior patterns (i.e., breeding, feeding, hibernating, etc.). In general, exclusions shall not occur during the maternity/pup-rearing season or during the hibernation season, as determined by conditions at the Project site.

MM 7-10 on pages 5.7-180 through 5.7-182 is hereby revised as follows:

MM 7-10 The Project Applicant/Developer shall preserve grasslands, including native perennial grassland and associated wildflower field vegetation types, at a minimum 2:1 ratio within the ~~approximate 27,408-acre~~ M~~m~~itigation P~~p~~reserve (see Table A). The Project would impact 6,416 acres of grasslands; therefore, a total of 12,832 acres of grassland mitigation acreage is required to bring impacts to a less than significant level.

TABLE A
GRASSLAND MITIGATION ACREAGES

Mitigation Area	Grasslands	Total Acreage
On-Site Mitigation Preserve ~~Unimpacted/SEA~~		
On-Site Mitigation Preserve ~~Unimpacted/SEA~~	1,989	~~3,861~~ 3,866
Subtotal (Total On-Site Mitigation Area)	*1,989*	*~~3,861~~ 3,866*
Off-Site Mitigation Preserve ~~Open Space~~		
Area 1	~~1,641~~ 1,734	6,417
Area 2	~~1,602~~ 1,597	2,556
Area 3	~~3,059~~ 0	4,183
Area 4	~~4,429~~ 706	7,319
Area 5	~~643~~ 0	643
Area 6	~~1,012~~ 1,005	2,429
Area 7	7,877	15,668
Subtotal (Total Off-site Mitigation Area)	*~~12,386~~ 12,919*	*~~23,547~~ 39,213*
Total Mitigation Area	**~~14,375~~ 14,908****	**~~27,408~~ 43,079**
~~SEA: Significant Ecological Area~~		
**Goal for 2:1 Grassland Mitigation is 12,832 Acres		

Mitigation for loss of those areas modeled as native perennial grassland will provide similar habitat quality as that which was lost. The result shall be native perennial grassland and wildflower field values that are equal to or greater than the overall ecological functions and values of those lost as a result of Project implementation. Preservation shall include dedication and long-term management working towards the goal of a self-sustaining system. Long-term management will include focused major problematic non-native species eradication (e.g., feral pigs) where feasible. Preservation will occur on open space lands on the Project site and on other lands within Tejon Ranch.

As outlined in Table A above, the ~~14,375~~ 14,908 acres of grassland preservation will occur in open space areas on site and in the ~~six~~ seven other areas. A full description of these areas is in PDF 7-2. Many of these grassland areas have been part of the expansive grassland studies conducted for the Project over the course of several years. Detailed plot analysis and modeling show the high level of similarity between these preserved grasslands and the grasslands within the Project impact area. In

addition, the grasslands are contiguous with other preserved open space in the region and support other important biological functions (e.g., drainages and local wildlife movement pathways). As a result, the preserved grassland is part of a more watershed-level preservation allowing for long-term sustainment and a total value that is greater than the sum of its parts.

The preservation phasing through conservation easements shall be based on the percentage of total area of impact per phase of development, regardless of specific resource impacts. The specific location of the acreage to be dedicated within a particular phase will be chosen to maximize the replacement of resource values lost during that phase of construction while maintaining as much contiguous acreage as possible. In order to preserve an adequate quantity of grassland, lands outside the County of Los Angeles, within the County of Kern, would be used for mitigation. As each phase is proposed, a percentage of the mitigation preserve (which is equivalent to the percentage of that phase's impacts) shall be dedicated concurrent with the entitlement approval of that phase.

Management of the Mitigation Preserve shall be in accordance with the Ranch-wide Management Plan (RWMP), which incorporates Best Management Practices for grazing, including Residual Dry Matter targets, and weed management, including invasive plant mapping and targeted removal actions (see RWMP Vol. II Sections 5.1 and 5.2). The RWMP includes standards for management of the grassland areas that will preserve the grasslands in perpetuity. The RWMP shall include a Figure depicting the Mitigation Preserve lands used to meet this 2:1 preserve ratio.

The ~~open space~~ Mitigation P~~p~~reserve, including the grasslands within it, shall be preserved in perpetuity to offset Project impacts on native grasslands and wildflower fields prior to issuance of a grading permit for the Project site. The phasing of mitigation has been previously described. The preservation and management of these grasslands through the ~~Native Perennial Grassland and Wildflower Field Mitigation Plan~~ RWMP will sufficiently offset and fully mitigate the impacts on native grasslands and wildflower fields associated with the Project.

The following further edit was identified subsequent to publication of the Final EIR and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors.

No further edits have been made to this text. The Table A of MM 7-10 is hereby revised as follows:

TABLE A
GRASSLAND MITIGATION ACREAGES

Mitigation Area	Grasslands	Total Acreage
On-Site Mitigation Preserve		
On-Site Mitigation Preserve	1,989	3,866
Subtotal (Total On-Site Mitigation Area)	*1,989*	*3,866*
Off-Site Mitigation Preserve		
Area 1	1,734	6,417
Area 2	1,597	2,556
Area 3	0	4,183
Area 4	706	7,319
Area 5	0	643
Area 6	1,005	2,429
Area 7	7,877	15,668
Subtotal (Total Off-site Mitigation Area)	*12,919*	*39,213*
Total Mitigation Area	**14,908****	**43,079**
**~~Goal for~~ 2:1 Grassland Mitigation requirement is 12,832 Acres		

MM 7-11 on pages 5.7-182 through 5.7-187 is hereby revised as follows:

MM 7-11 This measure prescribes mitigation for other special status vegetation types including mixed oak woodland, oak trees, and other riparian and wetland vegetation types. Each of these three vegetation types is discussed separately (native grassland and wildflower fields are addressed in MM 7-10).

Mixed Oak Woodlands

The Project Applicant/Developer shall create mixed oak woodlands to achieve resulting vegetation/habitat values. Since there would be approximately 6.2 acres of oak woodland impacts, mitigation will result in the preservation of a minimum of 6.2 acres of mixed oak woodland and creation of a minimum of 6.2 acres of mixed oak woodland, which will include the establishment of 322 oak trees completed as part of oak tree replacement in accordance with the County of Los Angeles oak tree permit requirements (see Oak Trees Section below). Oak trees established in created oak woodlands will be credited towards both oak woodland and oak tree mitigation requirements. If Project impacts are reduced through a

reduction in Project disturbance limits in oak woodland areas, required mitigation acreage will be reduced accordingly.

In accordance with mitigation options outlined in Section 21083.4 of the *California Public Resources Code* (PRC), replacement of oak woodlands shall consist of no greater than ½ of the oak woodland mitigation requirement. Therefore, half of the 6.2 oak woodland impact acreage will be mitigated via the alternate option of preservation. The combined acreage of oak woodland preserved both on site (unimpacted~~/~~ Significant Ecological Area [SEA]) and within the off-site mitigation areas is ~~3,102~~ 3,090 acres and is expected to substantially exceed the required 50 percent of mitigation as preservation.

Mitigation through creation is typically implemented on lands with minimal habitat value (e.g., ruderal vegetation, graded slopes) rather than in areas with a substantial component of existing native vegetation. However, evidence of lack of naturally occurring recruitment on site indicates that the existing woodlands are likely to be eventually replaced by non-woodland vegetation. Based on the lack of naturally occurring replacement trees, it is anticipated that oak woodland planting is necessary to sustain the oak woodlands. Therefore, the goal of oak resource mitigation efforts will be to create and enhance oak woodlands. To maximize potential for success, oak woodlands will be created within and adjacent to the same areas where oak woodlands currently exist. This method will create future generations of oak trees and oak woodland on the site in these areas. Details of the oak woodland mitigation program are described below in items 1–10.

1. To mitigate for impacts to oak woodland and oak trees, site-specific native acorns will be collected. Acorns will be collected within the watershed area of the Project site to ensure that acorns collected are of a similar genetic stock to those existing on the site. Some acorns will be planted and maintained in containers, and others will be stored and planted directly on site within the Oak Mitigation Areas.
2. To maximize oak woodland biological values and the potential for long-term success, some locally collected oak acorns will be planted directly into the ground. These acorns will be planted in appropriate locations in the Oak Mitigation Areas. The locations identified for acorn planting will be reviewed by the County Forester.

3. Container plants will be propagated and maintained from locally collected acorns. In this way, more established container plants will be available for mitigation efforts, and they will contain the most suitable genetic variability appropriate for the region to increase mitigation success. The preferred method of propagation will include the establishment of a temporary nursery on the Project site. The nursery will include partial shade areas to reduce water loss and a constant water supply to supplement planted trees. Using the acorns collected from within the watershed area of the Project site, container plantings will be cultivated at this location. Development of trees on site will ensure that they are acclimated to the typical weather conditions at their eventual permanent location. If necessary, and in consultation with the County Forester, acorns collected from the site may be stored or propagated and maintained under contract with a reputable native plant nursery off site.

4. To provide overstory, midstory, and understory tree/plant coverage, some container plants and oak trees, grown from locally collected acorns, will be installed in addition to the application of native seed mixes. Since studies indicate that the younger the planting is, the more likely the chance is for successful establishment and long term viability locally collected acorns as well as locally collected, nursery-cultivated young oak trees (one-gallon or five-gallon containers of oaks) would be planted on site. The oak woodland planting and seeding palettes will include a diversity of locally-collected native shrubs, subshrubs, grasses, forbs, and ferns, to provide a beneficial mosaic of understory vegetation.

5. The oak mitigation program will include the extensive salvage (from the impacted oak habitat areas) and placement of coarse woody debris, brush piles, and boulders (as available) to immediately provide (a) suitable micro-habitats for the establishment of plant species with particular shade and moisture requirements (e.g., ferns) and (b) improved habitat resources (e.g., cover) for wildlife species.

6. Irrigation will be provided to the oak plantings in a manner that simulates natural rain events; i.e., infrequent, deep watering. Irrigation will be suspended during periods of substantial rainfall, and irrigation will be terminated at the earliest possible date (depending on seasonal weather

patterns) in coordination with the County Forester, to optimize the drought resiliency and proper root development of the planted oaks. Additionally, all irrigation must be terminated for a minimum of five years before the oak mitigation areas will be eligible for final approval/sign-off.

~~5~~ 7. The Project Applicant/Developer will provide an annual report to the County that will include an accounting of each of the following in the mitigation areas: (a) the number of acorns planted; (b) the number of germinated acorns (whether planted or natural) protected; (c) the number of new oak trees planted in mitigation areas, including the species of each tree planted; (d) the caliper of each new tree planted and/or protected; (e) the acreage of woodlands created and/or conserved in the mitigation areas.

~~6~~ 8. Creation of structurally diverse oak woodland habitat within and contiguous to existing oak woodlands will be accomplished by planting locally collected oak acorns, plus yearly sowings of additional locally collected acorns, as well as, temporary irrigation, weed abatement, pest deterrence, and/or other maintenance tasks as needed to facilitate oak seedling germination and survival.

~~7~~ 9. Prior to Project grading, locally collected acorns will be planted and grown. Once trees reach a diameter of one inch just above ground surface (i.e., basal height) within the Oak Tree/Oak Woodland Mitigation Areas, they will be appropriated as "mitigation trees" to be used for oak woodland and oak tree permit mitigation purposes with approval from the County Forester as part of the oak woodland and oak tree permit mitigation process and will be credited as a mitigation tree if the tree is determined to be healthy by the Los Angeles County Forester at the end of the monitoring period.

~~8~~ 10. The required 12.4 acres of mixed oak woodland creation will occur within 473 acres of existing oak woodland (primary area) and 716 acres of adjacent low quality non-native grassland (secondary area, if needed) on the western portion of the Project site. Additional suitable areas may also be identified within reduced grading footprints following final detailed tract map production to the satisfaction of the County Forester. Mitigation planting areas will be refined within the proposed mitigation areas through a multi-variable query of existing Geographical

Information System (GIS) data sets, and intensive field analysis to precisely identify suitable planting locations (e.g., localized soil types, microtopography). Created oak woodlands will have an approximate average density of 80 appropriately sized oak trees per acre at the end of the monitoring period (or other density as directed by the County Forester), while staying within the mitigation areas. The contiguity of the created woodland habitat within or adjacent to existing oak woodlands will be ecologically beneficial, and will also improve the logistics of restoration installation, maintenance, and monitoring, compared to a fragmented habitat creation program. These methods will help to ensure the success of created oak woodlands to replace the existing woodlands over time.

~~9~~ 11. In order to implement the creation of habitat on the site and to ensure the persistence of the overall biological functions and values over time, the Project Applicant/Developer shall submit an Oak Woodland Habitat Mitigation Plan to the County for approval prior to the issuance of a grading permit for each tract map or combination of tract maps. The mitigation approach described in the Plan shall comply with Section 21083.4 of the *California Public Resources Code* (PRC), which was enacted by California Senate Bill (SB) 1334. County approval of the Plan shall be required prior to the initiation of any clearing or grading on the site that affects any oak woodland vegetation. The Oak Woodland Habitat Mitigation Plan shall be developed by a qualified Restoration Specialist, to be retained by the Project Applicant/Developer, and shall be subject to County approval. The objective of the Oak Woodland Habitat Mitigation Plan will be to preserve 6.2 acres of existing oak woodland and to create 6.2 acres of oak woodland. The Oak Woodland Habitat Mitigation Plan serves the purpose of satisfying the conditions of Section 21083.4 of the *California Public Resources Code*.

~~10~~ 12. Implementation of the Oak Woodland Mitigation Plan will be the responsibility of the Project Applicant/Developer or its designated party; the Plan shall specify, the following:

a. **Planting Management Program:** A Planting Management Program shall be prepared for review by the County Forester that will outline three planting seasons and will include (i) the first planting season, year 0, being the acorn and sun tolerant ground covers; (ii) the second planting season occurring at approximately year 5, introducing sun/shade tolerant species; and (iii) the third planting season at year 10 with the introduction of more shade tolerate understory species, including the use of reference sites.

~~a.~~ **b. Personnel:** The responsibilities and qualifications of personnel required to implement and supervise the plan will be specified. The responsibilities of the Landowner, County staff, Specialists, and Maintenance Personnel that will supervise and implement the plan will also be included.

~~b.~~ **c. Site Selection:** The mitigation site(s) will be determined in coordination with the project applicant/Developer and the County. The site(s) will be located in open space areas that will be managed in perpetuity through a conservation easement, open space dedication, performance bond, management at the Tejon Ranch Conservancy, or other method approved by the County Forester.

~~c.~~ **d. Native Species Seed Collection, Site Preparation, and Planting Implementation:** Under the supervision of the County Forester, site preparation will include (i) protection of existing native species; (ii) trash and weed removal; (iii) native species salvage and reuse (i.e., duff); (iv) soil treatments (i.e., imprinting, and/or decompacting); (v) erosion-control measures (i.e., rice or willow wattles); (vi) native seed mix application; and (vii) procedures for native seed collection from the site, including acorns of native oak species.

~~d.~~ **e. Schedule:** Restoration/revegetation sites will be established between October 1 and January 30. Seeding and planting of container plants will take place immediately after preparation of the mitigation sites and will take place under the supervision of the County Forester.

~~e.~~ f. Maintenance Plan and Guidelines: The Maintenance Plan, to be approved by the County, will include (i) weed control; (ii) herbivory control (e.g., feral pigs); (iii) trash removal; (iv) irrigation system maintenance; (v) maintenance training; (vi) replacement planting; and (vii) a vehicle washing program to capture invasive propagules. The Maintenance Plan will also indicate who is responsible for each of these listed tasks.

~~f.~~ g. Monitoring Plan: The monitoring plan, to be implemented for a 15-year period, and to be approved by the County, will include (i) qualitative monitoring (i.e., photographs and general observations); (ii) yearly quantitative monitoring (i.e., randomly placed transects to assess vegetation type coverage and systematically assess all mitigation oak trees); (iii) performance criteria as approved by the County; and (iv) annual reports that will be submitted to the County for five consecutive years after initial planting (or longer if the County requires) and following plan approval. The Plan shall be prepared by a qualified Restoration Specialist and approved by the County prior to any clearing or grading for any tract map that affects any oak woodland vegetation.

~~g.~~ h. Long-Term Preservation: Long-term preservation of the mitigation site(s) will be outlined in the Restoration Plan to ensure that they are not impacted by future development. An open space dedication, conservation easement, performance bond, management by the Tejon Ranch Conservancy, or other County-approved method will be used to ensure long-term preservation.

~~h.~~ i. Growth/Vegetation Standards: Growth/vegetation standards will be developed by a qualified Biologist in accordance with County and regulatory agency requirements.

Oak Trees

The mitigation approach for replacing lost oak trees shall comply with the County of Los Angeles Oak Tree Ordinance (CLAOTO) requirements. The goal of this program is to replace impacted oak trees at a ratio of 3:1 for non-heritage oaks and 10:1 for heritage oaks in accordance with the County's oak tree

permit requirements. This would result in the establishment of 322 oak trees. However, if Project impacts are reduced through a reduction in Project disturbance limits within oak woodland areas, required tree numbers will be reduced accordingly.

Mitigation trees are typically planted on lands with minimal habitat value (e.g., ruderal vegetation, graded slopes) rather than in areas with a substantial component of existing native vegetation. To maximize potential for success, oak trees will be planted in the same areas where oak woodlands currently exist. This method will create future generations of oak trees and oak woodland on the site in these areas and will be done as described in Numbers 1–10 under the "Mixed Oak Woodlands" portion above. Additionally, quantitative tree monitoring data for all mitigation trees (whether for County of Los Angeles Oak Tree Ordinance [CLAOTO] mitigation or oak woodland mitigation) will be submitted to the County Forester yearly and, for convenience, will be included as an appendix to the annual report required in 10(f)(ii) above.

Other Riparian and Wetland

In addition, the Applicant shall create, enhance, and/or restore all impacted riparian and wetland vegetation types that are not considered jurisdictional by permitting resource agencies (i.e., those not mitigated through regulatory permit conditions) at a 1:1 ratio. This applies to areas mapped as alluvial scrub; riparian herb; rush riparian grassland; southern arroyo willow riparian; southern willow scrub; unvegetated wash; willow riparian forest; willow riparian woodland; alkali meadow; Baltic rush; and seeps and ephemeral ponds. These areas shall be included in the Streambed and Wetland Habitat Creation and Enhancement Plan discussed in MM 7-12, which shall be approved by the County prior to issuance of grading permits.

<u>Consultation with representatives from the Angeles National Forest regarding oak and grasslands mitigation activities in SEA 17 shall occur prior to the commencement of oak tree planting in SEA 17.</u>

MM 7-12 on pages 5.7-187 through 5.7-190 is hereby revised as follows:

MM 7-12 Prior to any fill of or alteration to drainage tributaries, wetlands, and/or riparian vegetation on the Project site, the Project Applicant/Developer shall obtain the appropriate regulatory agency permits and/or agreements from the U.S. Army Corps of Engineers (USACE), the California Department of Fish and

Wildlife (CDFW), and the applicable Regional Water Quality Control Board (RWQCB). The Project Applicant/Developer shall comply with all construction mitigation measures specified in the EIR, regulatory agency permits, and/or agreements. Pursuant to the permit requirements, the Project Applicant/Developer will develop a Storm Water Pollution Prevention Plan (SWPPP) that incorporates Best Management Practices (BMPs) for reducing or eliminating construction-related pollutants in the site runoff.

The Project is subject to the following Mitigation Performance Standards: As anticipated to be required by USACE, CDFW, and Regional Water Quality Control Board (RWQCB) regulatory permits, the Project Applicant/Developer shall create, enhance, and/or restore acreage to ensure that net habitat values are at least equal to those lost from Project implementation. Mitigation ratios are typically specified in the regulatory permits. However, if mitigation is conducted prior to impacts taking place, mitigation ratios can be pro-rated; this type of mitigation pro-rating allows time to evaluate if created, enhanced, and/or restored habitat values are at least equal to those that will eventually be lost from Project implementation. Under this scenario, it can be verified that the restoration/creation goals have been accomplished or are proceeding satisfactorily.

The extent of drainages and wetlands that would be preserved under the Project will provide opportunities to expand and enhance the drainages, wetlands, and riparian vegetation throughout the Mitigation Preserve ~~on the Project site~~.

As discussed previously, a wetland functional assessment of the drainages and other aquatic features in the Project site was conducted by Glenn Lukos Associates in 2006 and 2009 in order to characterize and evaluate the functions of the site's drainages and riparian habitats (GLA 2009a). An update to that functional assessment was conducted in 2015 (BonTerra Psomas 2015a). Overall, aquatic resources on the site were evaluated in terms of Functional Capacity Units (FCU), which indicate more specifically the mitigation level necessary to restore riparian functions after Project implementation by providing a measure of the ability of a wetland area to perform typical wetland functions.

The purpose of the mitigation is to replace lost habitat value, as measured in FCU (or other acceptable functional value units)

rather than based on a standard acreage ratio. Alternatively, a more traditional mitigation ratio approach may be employed using following rates:

a. Wetland Waters: 2:1, including 1:1 restoration and 1:1 enhancement, of wetland waters.

b. Streams:

   i. 1:1 preservation of ephemeral and/or intermittent streams for permanent impacts to ephemeral non-wetland waters of the state (non-riparian)

   ii. 1:1 preservation of intermittent streams for permanent impacts to intermittent non-wetland waters of the state (non-riparian)

   iii. 1:1 restoration of intermittent streams for temporary impacts to intermittent non-wetland waters of the state (non-riparian)

c. Riparian Vegetation: 2:1, including 1:1 restoration and 1:1 enhancement of riparian vegetation.

Mitigation will include a combination of on-site and off-site preservation of jurisdictional resources; on-site and off-site enhancement/restoration of preserved jurisdictional resources in order to increase overall functional capacity; and the creation (expansion) of riparian/wetland habitats along degraded drainages, including Oso Creek and two of its tributaries in addition to the three other drainages (including the main drainage located along and immediately north of State Route [SR] 138).

The direct and indirect loss in on-site functional units will be mitigated through passive enhancement of open space areas, active enhancement of 6.5 acres of wetland, and creation of approximately 78.4 acres of wetland/riparian habitat (GLA 2009a). Following implementation of mitigation, the Project provides approximately 4,748.5 FCUs. Therefore, the proposed mitigation will result in a functional gain of 327.5 FCUs, thereby ensuring a net increase in functionality in the post-Project condition (GLA 2009a). In summary, implementation of the proposed jurisdictional resource mitigation will actually result in a net gain in the measurable functional capacity and

therefore, the habitat values, of the on-site and off-site drainages and other aquatic features.[3418]

To implement the creation/restoration/enhancement of streambed/wetland habitats on the site, the Project Applicant/Developer shall develop a Streambed and Wetland Habitat Creation and Enhancement Plan commensurate with regulatory agency permits and/or agreements. The purpose of this plan is to demonstrate the feasibility of creating the required mitigation acreage and to ensure that the overall biological functions and values are increased. The plan shall be developed by a qualified Restoration Specialist and shall be submitted ~~to the County for approval~~ and approved by the County and CDFW, and RWQCB prior to grading that would impact jurisdictional waters or wetlands. The Streambed and Wetland Habitat Creation and Enhancement Plan shall specify the following for each tentative tract map area:

- **Statement of Impacts:** A statement of impacts and avoidance shall be prepared, including temporary and permanent impacts.
- **Personnel:** Responsibilities and qualifications of the personnel required to implement and supervise the plan will be specified. The responsibilities of the Landowner, Specialists, and Maintenance Personnel that will supervise and implement the plan will also be included.
- **Site Selection:** Identification of preservation, enhancement and/or creation sites on Mitigation Preserve shall be included. A summary of location of preserved wetlands and/or waters required to achieve applicable preservation performance standards shall also be included. The sites for mitigation will be determined through coordination between the project applicant/Developer, the USACE, the CDFW, the applicable RWQCB, and the County.
- **Site Preparation and Planting Implementation:** Site preparation will include: (1) protection of existing native species; (2) trash and weed removal; (3) native species salvage and reuse (i.e., duff); (4) soil treatments (i.e., imprinting and/or decompacting); (5) fencing, grading and contouring to improve topographic heterogeneity and floodplain benching, erosion-control measures (i.e.,

[3418] For information about the functional values of the impacted jurisdictional resources and proposed mitigation areas, see GLA 2009b in Appendix 5.7-B.

rice or willow wattles); (6) seed mix application and quantities; and (7) procedures for seed collection from existing habitat on the site. Implementation procedures such as mulching will also be included.

- **Schedule:** Establishment of restoration/revegetation sites will be conducted between October 1 and January 30. Seeding and planting of container plants will take place immediately after preparation of the restoration sites.
- **Maintenance Plan/Guidelines:** The maintenance plan will include (1) weed control; (2) herbivory control; (3) trash removal; (4) irrigation system maintenance; (5) maintenance training; (6) replacement planting; ~~and~~ (7) vehicle washing program to capture invasive propagules; and (8) pest management.
- **Monitoring Plan:** The monitoring plan will include (1) qualitative monitoring (i.e., photographs and general observations); (2) quantitative monitoring (i.e., randomly placed transects); (3) vegetation performance success criteria, as approved by the USACE, the CDFW, and the applicable RWQCB [including success for species richness: (≥10), native vegetative cover (≥70 percent) and invasive species (≤5 percent)]; (4) biannual reports (i.e., two reports the first year) for the first year will be submitted to the USACE, the CDFW, the applicable RWQCB; and (5) annual reports, which will be submitted to all three agencies and the County for an additional four years after initial planting. The monitoring is planned for five years, but may be shorter or longer depending upon the performance of the mitigation sites.
- **Long-Term Preservation:** Long-term preservation of the mitigation sites will be outlined in the mitigation plan to ensure that they are not impacted by future development. An open space dedication, conservation easement, performance bond, management by the Tejon Ranch Conservancy, or other County-approved method will be used to ensure long-term preservation.
- **Performance Standards:** A statement of mitigation performance standard being met (functional value or acreage ratio) shall be included. These will be developed by conducting a biological functions and values assessment (using an accepted method such as Hydrogeomorphic Modeling [HGM]) to establish a

baseline for the overall biological value of the affected streambeds and riparian areas on the site. Revegetation will be considered successful at five years if the percent cover and species diversity of the restored and/or created habitat areas are similar to percent cover and species diversity of adjacent existing habitats, as determined by quantitative testing of existing, restored, and created habitat areas [for species richness (≥10), native vegetative cover (≥70 percent) and invasive species (≤5 percent)]. Contingency measures shall also be described in the event that mitigation efforts are not successful.

- **Temporary Impacts**: standards for minimizing and restoring temporary impacts, which include recontouring and erosion control for intermittent channels and reseeding requirements for riparian vegetation areas.
- **Cattle Exclusion Methods:** Measures to exclude cattle from habitat creation areas and enhancement areas (where applicable) shall be identified and described.
- **Funding:** The funding source(s) for all proposed mitigation actions shall be identified.

The Streambed and Wetland Habitat Creation and Enhancement Plan shall be subject to approval by the County, the USACE, the CDFW, and the applicable RWQCB for impacts within the respective jurisdictional areas of these agencies. If pro-rated mitigation ratios are used, it shall be demonstrated that the mitigation performance standards have been accomplished. The accomplishment shall be verified by the USACE, the CDFW, and the applicable RWQCB based on the performance standards established above prior to the County's issuance of a grading permit. Implementation of these mitigation measures may serve the dual purpose of satisfying the conditions (or a portion of the conditions) of the agreements/permits of the USACE, the CDFW, and the applicable RWQCB.

The first paragraph of MM 7-13 on page 5.7-190 is hereby revised as follows:

MM 7-13 The Project Applicant/Developer shall develop a Landscaping Plan for review and approval by the County Biologist. The Landscaping Plan shall be (1) prepared by a qualified biologist; (2) submitted to the County for approval with each tentative map; (3) provided to builders; (4) provided to future project occupants as described in the Specific Plan; and (5). which

> includes a plant palette composed of non-invasive species that are adapted to the conditions found on the Project site and do not require high irrigation rates. The Landscaping Plan will also include a list of invasive plant species prohibited from being planted on the Project site. In addition, retail sales of these invasive plant species will be prohibited at any businesses (nurseries) located within the Project site. Landscape plans shall encourage planting of local natives typical of native vegetation within ten miles of the Project site.

The following further edit was identified subsequent to publication of the Final EIR and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors. No further edits have been made to this text. The last paragraph of MM 7-13 on page 5.7-190 of the Draft EIR is hereby revised as follows:

> The Homeowners Association shall supply future residents of the Project site with the list of invasive plant species from the Landscaping Plan that will be prohibited from being planted on the Project site and educational materials that emphasize the importance of adhering to the list. The prohibition shall be clearly described and distributed to home buyers through their home purchase contacts and CC&Rs. A list of local native plants and educational materials shall be provided to homeowners and shall be posted on the community intranet.

The second sentence of MM 7-14 on page 5.7-191 is hereby revised as follows:

> The width of the underpass shall be 100 feet as it passes under SR-138 and shall flare out on both sides of the highway as it moves away from SR-138 to a 150-foot width in the Project open space adjacent to the highway.

The following text is hereby added within the first paragraph of MM 7-15 on page 5.7-191 of the Draft EIR:

> Waste and recycling receptacles that discourage foraging by wildlife species adapted to urban environments shall be installed by the Project Applicant/Developer in common areas (i.e., any area where public trash receptacles would be placed, such as parks, sidewalks, community centers, and walking trails) throughout the Project site. Common, residential, and commercial areas will all be served with wildlife resistant trash receptacles.

The second paragraph of MM 7-15 on page 5.7-191 is hereby revised as follows:

> The Homeowners Association shall supply an educational pamphlet to future residents of the Project site regarding: the importance of not feeding wildlife; information stating that trash (containing food) and microtrash that could potentially attract condors should not be accessible to wildlife; the necessity of keeping the ground free of fallen fruit from trees; and instructions about not

leaving pet food outside. Additionally, in order to minimize impacts on native wildlife, the use of rodenticides on the Project site shall be prohibited.

The following paragraph is hereby added after the last paragraph of MM 7-15 on page 5.7-191:

All vertical open pipes used for fence posts, property line stakes, signs, roof veneration, chimneys, vault toilets, and similar structures and metal fence stakes used on the Project site shall be capped. Capping can be accomplished using bolts or other materials to avoid raptor talons becoming entrapped within the bolt holes of metal fence stakes.

The following further edit was identified subsequent to publication of the Final EIR and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors. No further edits have been made to this text. The second paragraph of MM 7-15 on page 5.7-191 of the Draft EIR is hereby revised as follows:

The Homeowners Association shall post the information on the community intranet and shall supply an educational pamphlet to future residents of the Project site regarding: the importance of not feeding wildlife; information stating that trash (containing food) and microtrash that could potentially attract condors should not be accessible to wildlife; the necessity of keeping the ground free of fallen fruit from trees; and instructions about not leaving pet food outside. Additionally, in order to minimize impacts on native wildlife, the use of rodenticides on the Project site shall be prohibited. The prohibition shall be clearly described and distributed to home buyers through their home purchase contracts and CC&Rs.

In the last paragraph of MM 7-16 on page 5.7-192, the text of the fifth control is hereby revised as follows:

(5) Ensuring that all landscape container plants ~~installed within 200 feet of preserved populations~~ are ant free prior to installation to reduce the chance of colonies establishing in areas close to the preserved populations;

The following text is hereby added after the last paragraph of MM 7-16 on page 5.7-192:

Similarly, to preclude the invasion of Argentine ants into Mitigation Preserve lands, "dry zones" of a minimum of 350 feet shall be established between development and the Mitigation Preserve. Soil moistures shall be maintained at levels below about 10 percent soil saturation within dry zones to deter the establishment of nesting colonies of ants. All landscaping materials to be used in these zones shall be inspected and certified as “free” of Argentine ants prior to planting. Additionally, these materials shall be inspected by a qualified restoration specialist for the presence of Argentine ants. Plants or other materials with Argentine ants shall be rejected.

To prevent the establishment of invasive aquatic wildlife such as the American bullfrog (*Lithobates catesbeianus*) and the African clawed frog (*Xenopus laevis*), all Project flood control and other water retention features shall be monitored seasonally and following rain fall events to confirm pooling does not persist for more than 15 days. If such pooling beyond 15 days is detected, including, for example, in artificially created fishing/casting ponds which can only be constructed following issuance of a conditional use permit and further environmental review, the constructed pond location shall be checked routinely for presence of aquatic invasive wildlife by a qualified biologist until the unexpected pooling no longer persists. If detected, eradication measures to remove all invasive aquatic wildlife shall be implemented by the qualified biologist and may include one or more techniques, including trapping, pithing, and pellet shooting.

MM 7-17 on pages 5.7-192 and 5.7-193 is hereby revised as follows:

MM 7-17 The Project Applicant/Developer shall implement a public awareness program (prior to the first occupancy permit) in an effort to restrict public access to the riparian and open space areas on the Project site to designated trails and to prevent unleashed domestic animals from entering these areas. The program's educational materials shall discuss the presence of native animals (e.g., coyote, bobcat, and mountain lion), indicate that those native animals could prey on pets, indicate that no actions shall be taken against native animals should they prey on pets allowed outdoors, and indicate that pets must be leashed while using the designated trail system and/or in any areas within or adjacent to open space. The educational materials shall also discuss the impacts pets can have on native birds. Control of stray and feral cats and dogs will be conducted in open space areas on an as-needed basis. Feral cats and dogs may be trapped and deposited with the local Society for the Prevention of Cruelty to Animals or the Los Angeles County Department of Animal Control. This program shall include signs that identify the boundaries of ecologically sensitive areas (including the avoided special status plant populations described in MM 7-1); the use of temporary, wildlife-friendly fencing around sensitive areas that appear to be receiving a high level of disturbance until the disturbance is reversed; and promotion of public education and awareness of such areas. In addition to signage being located along the boundaries of the Mitigation Preserve, signage denoting the boundaries of ecologically sensitive areas and other pertinent information shall be included along the Pacific Crest Trail where it overlaps the Mitigation Preserve. The Project Applicant/Developer shall be responsible for the initial development of the public

awareness program and installation of interpretive signs and wildlife-friendly fencing. The Homeowners Association, the Project Applicant/Developer, or an acceptable Land Manager/Agency (as approved by the County) shall be responsible for maintaining this program, including signs and wildlife-friendly fencing.

Only passive recreational activities shall be permitted within the designated natural open space areas and shall be restricted to trails. Some areas may allow slightly greater impacts if designated as picnic and/or camping areas.

Domestic cats shall be prohibited from free-roaming (i.e., be allowed outdoors), and shall be required to have a microchip. All dogs shall be required to be leashed while in the designated natural open space areas, and bags for removing pet excrement will be provided at trail entrances and other appropriate locations. In addition, all dogs and cats shall be required to be neutered or spayed; all dogs shall be required to have a microchip; and potential owners shall show evidence prior to entry into the Centennial Development, as required by Los Angeles County Code (Section 10.20.350). These restrictions/features and their purpose will be described within educational material and distributed to new homeowners and made available to all homeowners as needed.

The following further edit was identified subsequent to publication of the Final EIR and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors. No further edits have been made to this text. The third paragraph of MM 7-17 on page 5.7-193 of the Draft EIR is hereby revised as follows:

Domestic cats shall be prohibited from free-roaming (i.e., be allowed outdoors), and shall be required to have a microchip. All dogs shall be required to be leashed while in the designated natural open space areas, and bags for removing pet excrement will be provided at trail entrances and other appropriate locations. In addition, all dogs and cats shall be required to be neutered or spayed; all dogs shall be required to have a microchip; and potential owners shall show evidence prior to entry into the Centennial Development, as required by Los Angeles County Code (Section 10.20.350). These restrictions/features and their purpose will be described within educational material and distributed to new homeowners ~~and~~, shall be posted on the community intranet, made available to all homeowners as needed, and shall be clearly described and distributed to home buyers through their home purchase contracts and CC&Rs.

MM 7-21 on page 5.7-194 is hereby revised as follows:

MM 7-21 In order to ensure that no direct impacts to Significant Ecological Area (SEA) 17 occur, brush clearance zones shall be contained within the current Project impact boundary and no overlap with the adjacent SEA 17 shall occur. Vegetation management for fire abatement purposes is not authorized in SEA areas. An Implementation Plan, including fire risk abatement measures (including but not limited to vegetation management) required to comply with State and County fire prevention and response legal requirements, shall be submitted as part of the tentative tract map for portions of the Project site that border an SEA or mitigation preserve area. The Plan shall include: (a) a summary of applicable State and County fire risk abatement requirements; (b) a prohibition on the use of vegetation clearance within SEA 17 or mitigation preserve areas. The Plan shall be submitted to the County for approval with the first tentative map, and shall be updated to include new or modified State or County fire risk abatement requirements as part of each subsequent tentative tract map submittal. ~~The Plan shall include this prohibition on vegetation clearance within these biologically sensitive areas.~~

MM 7-22 on page 5.7-194 is hereby revised as follows:

MM 7-22 If a golf course is developed as part of Project implementation, the Project Applicant/Developer shall prepare a Golf Course Management Plan that requires any golf course developed on the site to incorporate the design and management measures consistent ~~be built and managed in accordance~~ with the Audubon Cooperative Sanctuary Program for Golf Courses (or equivalent), which is a cooperative effort between the United States Golf Association and Audubon International that is designed to promote ecologically sound land management and to conserve natural resources (see Appendix 5.7-E). The Plan shall be submitted to the County for approval with any tentative map that includes a golf course.

MM 7-23 is hereby added immediately after MM 7-22 as follows:

MM 7-23 Notwithstanding any provision of the Centennial Specific Plan to the contrary, land designated by the Centennial Specific Plan as On-Site Mitigation Preserve, Off-Site Mitigation Preserve, Disturbed Green Space, and Undisturbed Green Space shall only be used in a manner consistent with the following land use restrictions:

On-Site Mitigation Preserve: Uses within the On-site Mitigation Preserve shall be restricted to use and continued maintenance of existing ranch roads and trails for access as well as hiking and biking for private inholding owners and permitted Ranch guests. Public access and recreational hunting shall be prohibited. Authorized motorized vehicles including but not limited to Tejon Ranch employees, utility maintenance vehicles, that have a Tejon Ranch permit and emergency vehicles shall be restricted to existing ranch roads and all recreational motorized vehicles shall be prohibited. No improvements beyond what is necessary to maintain roads, fences, etcetera, in their current state shall be allowed, with the exception of the placement of two new water towers discussed below. Only habitat enhancement, restoration and creation activities approved by the County and described in the Mitigation Preserve Management Plan shall be permitted. New impacts shall be limited to the placement of two water towers with disturbance impacts of no more than five acres each. Grazing shall be allowed to continue as directed by the Mitigation Preserve Management Plan strictly for resource management values.

Off-Site Mitigation Preserve: Uses within the Off-site Mitigation Preserve shall be restricted to use and continued maintenance of existing ranch roads and trails for access as well as hiking and biking for private inholding owners and permitted Ranch guests. Public access shall be prohibited. Authorized motorized vehicles including but not limited to Tejon Ranch employees, utility maintenance vehicles, that have a Tejon Ranch permit and emergency vehicles shall be restricted to existing ranch roads and all recreational motorized vehicles shall be prohibited. No improvements beyond what is necessary to maintain roads, fences, etcetera, in their current state shall be allowed, Recreational hunting shall be restricted to Ranch authorized individuals and within designated hunting areas only. Only habitat enhancement, restoration and creation activities approved by the County and described in the Mitigation Preserve Management Plan shall be permitted. Grazing shall be allowed to continue as directed by the Mitigation Preserve Management Plan strictly for resource management values.

Disturbed Green Space: Uses within Disturbed Green Space shall be restricted to one or more of the following: golf course, equestrian, natural parks, trails, cultural monuments, water retention basins, open space uses, utilities, grading, crop production, grazing, special events, and mitigation activities.

> Undisturbed Green Space: Uses within Undisturbed Green Spaces shall be restricted to one or more of the following: continued maintenance of existing ranch roads and trails for access as well as hiking and biking for private inholding owners and permitted Ranch guests. Public access and recreational hunting shall be prohibited. Authorized motorized vehicles including but not limited to Tejon Ranch employees, utility maintenance vehicles, that have a Tejon Ranch permit and emergency vehicles shall be restricted to existing ranch roads and all recreational motorized vehicles shall be prohibited. Restricted access signage shall be posted along interface with public areas. Wildlife friendly fencing will be used to demarcate the edge of restricted access green space.

The following further edit was identified subsequent to publication of the Final EIR and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors. No further edits have been made to this text. The second and third paragraphs of MM 7-23 are hereby revised as follows:

> On-Site Mitigation Preserve: Uses within the On-site Mitigation Preserve shall be restricted to use and continued maintenance of existing ranch roads and trails for access as well as hiking and biking for private inholding owners and permitted Ranch guests. Public access and recreational hunting shall be prohibited. Authorized motorized vehicles including but not limited to Tejon Ranch employees, utility maintenance vehicles, that have a Tejon Ranch permit and emergency vehicles shall be restricted to existing ranch roads and all recreational motorized vehicles shall be prohibited. No improvements beyond what is necessary to maintain roads, fences, etcetera, in their current state shall be allowed, with the exception of the placement of two new water towers discussed below. Only habitat enhancement, restoration and creation activities approved by the County and described in the ~~Mitigation Preserve~~ Ranch-wide Management Plan shall be permitted. New impacts shall be limited to the placement of two water towers with disturbance impacts of no more than five acres each. Grazing shall be allowed to continue as directed by the ~~Mitigation Preserve~~ Ranch-wide Management Plan strictly for resource management values.
>
> Off-Site Mitigation Preserve: Uses within the Off-site Mitigation Preserve shall be restricted to use and continued maintenance of existing ranch roads and trails for access as well as hiking and biking for private inholding owners and permitted Ranch guests. Public access shall be prohibited. Authorized motorized vehicles including but not limited to Tejon Ranch employees, utility maintenance vehicles, that have a Tejon Ranch permit and emergency vehicles shall be restricted to existing ranch roads and all recreational motorized vehicles shall be prohibited. No improvements beyond what is necessary to maintain roads, fences, etcetera, in their current state shall be allowed,

Recreational hunting shall be restricted to Ranch authorized individuals and within designated hunting areas only. Only habitat enhancement, restoration and creation activities approved by the County and described in the ~~Mitigation Preserve~~ Ranch-wide Management Plan shall be permitted. Grazing shall be allowed to continue as directed by the ~~Mitigation Preserve~~ Ranch-wide Management Plan strictly for resource management values.

The following revision is hereby made to the last reference on page 5.7-197:

California Department of Fish and Game (CDFG). ~~2010~~ 2003 (September). *List of Vegetation Alliances and Associations, Vegetation Classification and Mapping Program.* Sacramento, CA: CDFG.

Section 5.9 – Population, Housing, and Employment

The second full paragraph on page 5.9-27 is hereby revised as follows:

Since the Project's estimated population of 57,150 residents would represent 14.1 percent of the buildout population of the Antelope Valley's unincorporated area, the Project would not be taking up a large portion of future growth planned for the area. Rather, it would result in a population increase that would be in accordance with County projections and, within the context of County planning, would not lead to substantial unanticipated growth on the Project site or in the Antelope Valley.

Section 5.10 – Traffic, Access, and Circulation

All references to the "Centennial Transportation Improvement Program" or "CTIP" are hereby revised throughout the Draft EIR as follows:

~~Centennial Transportation Improvement Program (CTIP)~~ Traffic Mitigation Agreement

Four new rows are hereby added to at the top of Table 5.10-2 on page 5.10-17 as follows:

TABLE 5.10-2
CAPACITIES FOR FREEWAYS AND EXPRESSWAYS – EXISTING CONDITIONS

Location		Lanes	MSF	f_W	P_T	E_T	f_{HV}	f_P	SF/ Lane
I-5									
90	Btw. Bear Mountain & Old Rive	2M	2,400	1.0	29%	1.5	0.87	1.00	2,096
91	Btw. Old Rive & Copus Rd	2M	2,400	1.0	29%	1.5	0.87	1.00	2,096
92	Btw. Copus Rd & Maricopa Hwy	2M	2,400	1.0	29%	1.5	0.87	1.00	2,096
93	Btw. Maricopa Hwy & SR-99	2M	2,400	1.0	29%	1.5	0.87	1.00	2,096
1	Btw SR-99 and Laval/Wheeler	4M	2,400	1.0	22%	1.5	0.90	0.95	2,050

Four new rows are hereby added at the top of Table 5.10-4 on page 5.10-24 and the AADT for Intersections 1, 2 and 3a is hereby revised as follows:

TABLE 5.10-4
EXISTING (2014 AND 2015) FREEWAY PEAK HOUR VOLUMES AND V/C SUMMARY – NORTHBOUND AND EASTBOUND

Location		AADT Volume (2-Way)	Northbound/Eastbound					
			Lanes	Total Capacity	AM Vol	AM V/C	PM Vol	PM V/C
I-5								
90	Btw. Bear Mountain & Old River Rd	36,000	2M	4,192	685	0.16	840	0.20
91	Btw. Old River Rd & Copus Rd	36,000	2M	4,192	689	0.16	844	0.20
92	Btw. Copus Rd & Maricopa Hwy	36,000	2M	4,192	695	0.17	851	0.200
93	Btw. Maricopa Hwy & SR-99	37,000	2M	4,192	627	0.15	425	0.10
1	Btw SR-99 and Laval/Wheeler	82~~75~~,000	4M	8,200	1,561	0.19	2,158	0.26
2	Btw Laval/Wheeler and Grapevine	75~~74~~,000	4M	8,200	1,570	0.19	2,051	0.25
3a	Btw. Grapevine and Fort Tejon Rd (Mixed-flow)	51~~50~~,000	2M	4,412	1,013	0.23	1,362	0.31

Four new rows are hereby added at the top of Table 5.10-5 on page 5.10-28 and the AADT for Intersections 1, 2 and 3a is hereby revised as follows:

TABLE 5.10-5
EXISTING (2014 AND 2015) FREEWAY PEAK HOUR VOLUMES AND V/C SUMMARY – SOUTHBOUND AND WESTBOUND

Location		AADT Volume (2-Way)	Southbound/Westbound					
			Lanes	Total Capacity	AM Vol	AM V/C	PM Vol	PM V/C
I-5								
90	Btw. Bear Mountain & Old River Rd	36,000	2M	4,192	664	0.16	833	0.20
91	Btw. Old River Rd & Copus Rd	36,000	2M	4,192	668	0.16	838	0.20
92	Btw. Copus Rd & Maricopa Hwy	36,000	2M	4,192	673	0.16	845	0.20
93	Btw. Maricopa Hwy & SR-99	37,000	2M	4,192	242	0.06	377	0.09
1	Btw SR-99 and Laval/Wheeler	82~~75~~,000	4M	8,200	1,461	0.18	1,884	0.23
2	Btw Laval/Wheeler and Grapevine	75~~74~~,000	4M	8,200	1,422	0.17	1,780	0.22
3a	Btw Grapevine and Fort Tejon Rd	51~~50~~,000	2M	4,140	880	0.21	1,038	0.25

The second full paragraph on page 5.10-36 is hereby revised as follows:

> There is no implementation schedule for the NW SR-138 Project; however, the draft EIR/EIS for the proposed improvements was made available for public review in July 2016. The draft NW SR-138 EIR/EIS, TAR and ICE Report ~~do~~ did not identify a preferred alternative and Caltrans deferred the selection of a preferred alternative to the Final EIR/EIS. In June 2017 the Final EIR/EIS identified Alternative 2 (Expressway/Highway) as the preferred alternative. Alternative 2 would include a 6-lane freeway from the I-5 interchange to Gorman Post Road, a 6-lane Expressway from Gorman Post Road to 300th Street West, a 4-lane expressway from 300th Street West to 240th Street West, and a 4-lane limited access conventional highway from 240th Street West to the SR-14 interchange, generally following the existing alignment of SR-138. Caltrans has also reserved the right to determine the specific preferred intersection control based on the traffic and safety data at the time the improvements occur. A Supplemental Traffic Study (STS) has been prepared to incorporate the preferred Alternative 2 for SR-138 into the Project analysis. The STS is attached as Appendix 5.10-C of this Final EIR. The STS evaluates potential impacts using the Highway Capacity Manual (HCM) methodology and the North County Sub-Area Model utilized in the NW SR-138 Final EIR/EIS as updated by Los Angeles County to reflect the Antelope Valley Area Plan approved by the County in June 2015. The STS determined that the implementation of Alternative 2, and additional improvements to SR-138 that may be required under cumulative conditions with full Project buildout, will not result in any new or more severe significant physical construction and operational impacts than considered in the NW SR-138 Final EIR/EIS and the Project Draft EIR. The STS also demonstrates that, using the HCM methodology, the Project will not result in any new or more severe significant impacts to applicable highway segments, intersections and ramps than considered in the Project Draft EIR.

The last row of Table 5.10-8 on page 5.10-41 is hereby revised as follows:

TABLE 5.10-8
VOLUME/CAPACITY RATIO LEVEL OF SERVICE RANGES

LOS	V/C Ratio Range	
	Arterial Roads and Intersections[a]	**Freeway Segments (FFS = 75 mph)[b]**
A	0.00–0.60	0.00–0.34
B	0.61–0.70	0.35–0.56
C	0.71–0.80	0.57–0.76
D	0.81–0.90	0.77–0.90
E	0.91–1.00	0.91–1.00
F	Above 1.00	Above 1.00

LOS: Level of Service; V/C Ratio: volume-to-capacity ratio; FFS: free flow speed; mph: miles per hour

[a] Traffic Impact Analysis Report Guidelines

[b] Highway Capacity Manual 2010

Source: Stantec 2017 (Table 1-2).

The first sentence under "Impact Criteria for Freeway Mainline Segments" on page 5.10-41 is hereby revised as follows:

> The impact analysis for freeway mainline segments is based on peak hour volumes by direction for SR-14 and I-5.

The first sentence on page 5.10-43 is hereby revised as follows:

> To achieve conformity in the evaluation of freeway mainline segments and acknowledging that there exist some such rural segments as described above within the study area, Caltrans has agreed that, for evaluation of the study area for the Project, LOS E is to be uniformly utilized as the performance criterion for freeways studied for the purpose of determining significant Project impacts within the study area, with the following exception:

The third sentence under "On-Site Impacts" on page 5.10-51 is hereby revised as follows:

> It is estimated that 40 percent of the trips made on-site would be 3 miles or less in length, ~~which is a comfortable biking distance that most people can make in less than 15 to 20 minutes,~~ and close to 70 percent of the trips would be 4 miles or less, which are comfortable biking distances that most people can make in less than 15 to 20 minutes.

The following edits were identified subsequent to publication of the Final EIR and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors. No further edits have been made to this text. The last sentence of the fourth full paragraph on page 5.10-52 of the Draft EIR is hereby revised as follows:

> In the event that a CTIP is not entered into, MM 10-3, MM 10-6 through MM 10-~~28~~ 24, and MMs 10-~~31~~ 27 through 10-~~45~~ 41 require that the Project Applicant contribute fair share funding towards the improvements required to mitigate for Project impacts.

The first sentence of the second paragraph under "Off-Site Impacts, Existing Plus Project Scenario" on page 5.10-53 is hereby revised as follows:

> An evaluation of the off-site impacts to SR-138 ~~roadway segments and intersections~~ and freeway mainline segments, freeway ~~and~~ ramps and arterial intersections due to buildout of the Specific Plan under existing plus Project conditions was prepared by directly adding the traffic that would be generated by the Project to existing conditions.

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Table 5.10-21 on page 5.10-57 are hereby revised as follows:

TABLE 5.10-21
FREEWAY/EXPRESSWAY VOLUME AND CAPACITY SUMMARY – EXISTING (2014 AND 2015) PLUS PROJECT WITH EXISTING LANES

Location		ADT Volume	Northbound/Eastbound							Southbound/Westbound							LOS Threshold	Project Impact?
			Lanes	Cap/ Lane	Total Cap	AM Vol	AM V/C	PM Vol	PM V/C	Lanes	Cap/ Lane	Total Cap	AM Vol	AM V/C	PM Vol	PM V/C		
I-5																		
90	Btw. Bear Mountain & Old River Rd		2M							2M							LOS D	
	2015 Count	36,000		2,096	4,192	685	0.16	840	0.20		2,096	4,192	664	0.16	833	0.20		
	Project Traffic	1,700				31		2					121		30			
	2015 + Full Project	37,700		2,096	4,192	716	0.17	842	0.20				785	0.19	863	0.21		
	Project V/C						0.01		0.00					0.03		0.01		
91	Btw. Old River Rd & Copus Rd		2M							2M							LOS D	
	2015 Count	36,000		2,096	4,192	689	0.16	844	0.20		2,096	4,192	668	0.16	838	0.20		
	Project Traffic	1,800				33		6					127		34			
	2015 + Full Project	37,800		2,096	4,192	722	0.17	850	0.20				795	0.19	872	0.21		
	Project V/C						0.01		0.00					0.03		0.01		
92	Btw. Copus Rd & Maricopa Hwy		2M							2M							LOS D	
	2015 Count	36,000		2,096	4,192	695	0.17	851	0.20		2,096	4,192	673	0.16	845	0.20		
	Project Traffic	1,900				35		10					133		38			
	2015 + Full Project	37,900		2,096	4,192	730	0.17	861	0.21				806	0.19	883	0.21		
	Project V/C						0.00		0.00					0.03		0.01		
93	Btw. Maricopa Hwy & SR-99		2M							2M							LOS D	
	2015 Count	37,000		2,096	4,192	627	0.15	425	0.10		2,096	4,192	242	0.06	377	0.09		
	Project Traffic	2,100				37		18					140		42			
	2015 + Full Project	39,100		2,096	4,192	664	0.16	443	0.11				382	0.09	419	0.10		
	Project V/C						0.01		0.00					0.03		0.01		
1	Btw SR-99 and Laval/Wheeler		4M							4M								
	2015 Count	8275,000		2,050	8,200	1,561	0.19	2,158	0.26		2,050	8,200	1,461	0.18	1,884	0.23		
	Project Traffic	8,300				168		206					489		251		LOS D	
	2015 + Full Project	9083,300		2,050	8,200	1,729	0.21	2,364	0.29		2,050	8,200	1,950	0.24	2,135	0.26		
	Project V/C						0.02		0.03					0.06		0.03		
2	Btw Laval/Wheeler and Grapevine		4M							4M								
	2015 Count	7574,000		2,050	8,200	1,570	0.19	2,051	0.25		2,050	8,200	1,422	0.17	1,780	0.22		
	Project Traffic	8,800				198		256					509		301		LOS D	
	2015 + Full Project	8382,800		2,050	8,200	1,768	0.22	2,307	0.28		2,050	8,200	1,931	0.24	2,081	0.25		
	Project V/C						0.03		0.03					0.07		0.03		
3a	Btw Grapevine and Fort Tejon Rd (MF)		2M							2M								
	2015 Count	5157,000		2,206	4,412	1,013	0.23	1,362	0.31		2,070	4,140	880	0.21	1,038	0.25		
	Project Traffic	8,200				139		204					387		267		LOS D	
	2015 + Full Project	5958,200		2,206	4,412	1,152	0.26	1,566	0.35		2,070	4,140	1,267	0.31	1,305	0.32		
	Project V/C						0.03		0.04					0.10		0.07		
3b ~~a~~	Btw Grapevine and Fort Tejon Rd (MF + Truck lane)		2T							2T								
	2015 Count	24,000		1,025	2,b050	528	0.26	673	0.33		1,025	2,050	518	0.25	744	0.36		
	Project Traffic	1,600				89		102					151		94		LOS D	
	2015 + Full Project	25,600		1,025	2,050	617	0.30	775	0.38		1,025	2,050	669	0.33	838	0.41		
	Project V/C						0.04		0.05					0.08		0.05		

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The following edit was identified subsequent to publication of the Final EIR and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors. No further edits have been made to this text. Number 4 on page 5.10-85 is hereby revised as follows:

~~4. **290th St W and SR-138**~~	~~Widen SR-138 to a four-lane highway from westerly Project entrance to 290th Street West, with auxiliary lanes between intersections, resulting in three through lanes in the WB and EB directions. Additional intersection improvements include two EB left-turn lanes, one WB right-turn lane, two SB left-turn and two SB right-turn lanes. Install traffic signal. Or, contribute fair share to intersection improvements being advanced by Caltrans in the Northwest 138 Corridor Improvement Project (specific improvements pending Caltrans selection of a preferred alternative). (MM 10-10 and Traffic Study MM-5)~~

The following edit was identified subsequent to publication of the Final EIR and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors. No further edits have been made to this text. Number 9 on page 5.10-86 is hereby revised as follows:

~~9. **190th St W and SR-138**~~	~~Widen SR-138 to a four-lane highway from 290th Street West to 190th Street West with roadway augmentation at intersection, approximately ¼ mile in length for the west and east legs resulting in three through lanes in the WB and EB directions. Additional improvements include adding one EB left-turn lane, one WB left-turn lane, one NB left-turn lane and one SB left-turn lane and one dedicated EB right-turn lane. Install traffic signal. Or, contribute fair share to intersection improvements being advanced by Caltrans in the Northwest 138 Corridor Improvement Project (specific improvements pending Caltrans selection of a preferred alternative). (MM 10-15 and Traffic Study MM-10)~~

The following edit was identified subsequent to publication of the Final EIR and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors. No further edits have been made to this text. Number 11 on page 5.10-87 is hereby revised as follows:

~~11.~~ **~~110th St W and SR-138~~**	~~Roadway augmentation at intersection, approximately ¼ mile in length for the east and west legs, resulting in two through lanes in the WB and EB directions at the intersection. Additional improvements include one EB left-turn lane, one WB left-turn lane, two NB left-turn lanes, one SB left-turn lane and two SB right-turn lanes. Install traffic signal. Or, contribute fair share to intersection improvements being advanced by Caltrans in the Northwest 138 Corridor Improvement Project (specific improvements pending Caltrans selection of a preferred alternative). (MM 10-17 and Traffic Study MM-12)~~

The following edits were identified subsequent to publication of the Final EIR and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors. No further edits have been made to this text. Number 14 on page 5.10-87 is hereby revised as follows:

14. **~~30th St W~~ <u>SR-14</u> and SR-138**	~~Roadway augmentation at intersection, approximately ¼ mile in length for the east and west legs, resulting in two through lanes in the WB and EB directions at the intersection. Additional improvements include adding one EB left-turn lane and one WB left-turn lane.~~ <u>Installation of traffic signals at the NB off-ramp and the SB off-ramp at the SR-14 and SR-138 interchange.</u> Or, contribute fair share to intersection improvements being advanced by Caltrans in the Northwest 138 Corridor Improvement Project ~~(specific improvements pending Caltrans selection of a~~ preferred alternative~~)~~. (MM 10-~~20~~ <u>17</u> and Traffic Study MM-15)

Table 5.10-25 on page 5.10-93 is hereby revised as follows:

TABLE 5.10-25
FREEWAY VOLUME AND CAPACITY SUMMARY – CUMULATIVE (2035 AND 2040) CONDITIONS WITH AND WITHOUT THE PROJECT

Location	ADT Volume	NORTHBOUND/EASTBOUND							SOUTHBOUND/WESTBOUND							LOS Threshold	Project Impact?
		Lanes	Cap/ Lane	Total Cap	AM Vol	AM V/C	PM Vol	PM V/C	Lanes	Cap/ Lane	Total Cap	AM Vol	AM V/C	PM Vol	PM V/C		
I-5																	
90 Btw. Bear Mountain & Old River Rd		2M							2M							LOS D	
2015 Count	36,000		2,096	4,192	685	0.16	840	0.20		2,096	4,192	664	0.16	833	0.20		
2040 Without Project	45,000		2,096	4,192	2,380	0.57	2,540	0.61		2,096	4,192	1,800	0.43	2,330	0.56		
2040 With Project	46,000		2,096	4,192	2,450	0.58	2,540	0.61		2,096	4,192	1,800	0.43	2,400	0.57		
Project Traffic & V/C	1,000				70		0					0		70			
91 Btw. Old River Rd & Copus		2M							2M							LOS D	
2015 Count	36,000		2,096	4,192	689	0.16	844	0.20		2,096	4,192	668	0.16	838	0.20		
2040 Without Project	47,000		2,096	4,192	2,400	0.57	2,560	0.61		2,096	4,192	1,820	0.43	2,340	0.56		
2040 With Project	48,000		2,096	4,192	2,470	0.59	2,560	0.61		2,096	4,192	1,820	0.43	2,410	0.57		
Project Traffic & V/C	1,000				70		0					0		70			
92 Btw. Copus & Maricopa Hwy		2M							2M							LOS D	
2015 Count	36,000		2,096	4,192	695	0.17	851	0.20		2,096	4,192	673	0.16	845	0.20		
2040 Without Project	48,000		2,096	4,192	2,410	0.57	2,580	0.62		2,096	4,192	1,840	0.44	2,350	0.56		
2040 With Project	49,000		2,096	4,192	2,490	0.59	2,580	0.62		2,096	4,192	1,840	0.44	2,420	0.58		
Project Traffic & V/C	1,000				80		0					0		70			
93 Btw. Maricopa Hwy & SR-99		2M							2M							LOS D	
2015 Counts	34,000		2,096	4,192	630	0.15	430	0.10		2,096	4,192	240	0.06	380	0.09		
2040 Without Project	48,000		2,096	4,192	2,440	0.58	2,740	0.65		2,096	4,192	2,040	0.49	2,380	0.57		
2040 With Project	49,000		2,096	4,192	2,520	0.60	2,740	0.65		2,096	4,192	2,040	0.49	2,470	0.59		
Project Traffic & V/C	1,000				80		0					0		90			
1 Btw SR-99 and Laval/Wheeler		4M							4M								
2015 Count	8275,000		2,050	8,200	1,561	0.19	2,158	0.26		2,050	8,200	1,461	0.18	1,884	0.23		
2040 Without Project	114,300110, 250		2,050	8,200	5,250120	0.6462	6,730570	0.8280		2,050	8,200	4,79054 0	0.5855	6,33017 0	0.7775	LOS D	
2040 With Project	118,250		2,050	8,200	5,420	0.66	6,730	0.82		2,050	8,200	4,810	0.59	6,690	0.82		
Project Traffic & V/C	3,9508,000				170300	0.0204	160	0.02				270	0.014	360520	0.057		
2 Btw Laval/Wheeler and Grapevine		4M							4M								
2015 Count	7574,000		2,050	8,200	1,570	0.19	2,051	0.25		2,050	8,200	1,422	0.17	1,780	0.22		
2040 Without Project	108,500105, 450		2,050	8,200	5,090	0.62	6,250	0.76		2,050	8,200	4,580	0.56	5,560	0.68	LOS D	
2040 With Project	114,450		2,050	8,200	5,420	0.66	6,450	0.79		2,050	8,200	4,880	0.60	6,140	0.75		
Project Traffic & V/C	5,9509,000				330	0.04	200	0.03				300	0.04	580	0.07		
3a Btw Grapevine and Fort Tejon Rd (MF)		2M							2M								
2015 Count	5150,000		2,206	4,412	1,013	0.23	1,362	0.31		2,070	4,140	880	0.21	1,238	0.30		
2040 Without Project	6263,400		2,206	4,412	3,260	0.74	5,310	1.20		2,070	4,140	3,310	0.80	4,250	1.03	LOS D	
2040 With Project	70,800		2,206	4,412	3,500	0.79	5,500	**1.25**		2,070	4,140	3,520	0.85	4,650	**1.12**		Yes
Project Traffic & V/C	87,400				240	0.05	190	0.05				210	0.05	400	0.09		
3b a Btw Grapevine and Fort Tejon Rd (MF + Truck lane)		2T							2T								
2015 Count	24,000		1,025	2,050	528	0.26	673	0.33		1,025	2,050	518	0.25	744	0.36		
2040 Without Project	33,900		1,025	2,050	900	0.44	990	0.48		1,025	2,050	950	0.46	930	0.45	LOS D	
2040 With Project	36,500		1,025	2,050	1,020	0.50	1,050	0.51		1,025	2,050	1,060	0.52	1,160	0.57		
Project Traffic & V/C	2,600				120	0.06	60	0.03				110	0.06	230	0.12		

Rows 11 through 13 of Table 5.10-25 on page 5.10-94 are hereby revised as follows:

11	Btw Smokey Bear Rd and Vista Del Lago Rd		4M							4M								
	2014 Count	70,000		1,489	5,957	1,351	0.23	2,359	0.40		1,489	5,957	1,309	0.22	2,240	0.38		
	2035 Without Project	110,000		1,489	5,957	2,110~~330~~	0.3~~539~~	4,150	0.70		1,489	5,957	2,980	0.50	3,070~~23~~ ~~0~~	0.52~~54~~	LOS D	
	2035 With Project	129,000		1,489	5,957	2,490	0.42	5,500	**0.92**		1,489	5,957	4,390	0.74	3,610	0.61		Yes
	Project Traffic & V/C	19,000				~~380160~~	~~0.0703~~	1,350	0.22				1,410	0.24	~~540380~~	~~0.0907~~		
12	Btw Vista Del Lago Rd and Templin Hwy		4M							4M								
	2014 Count	70,000		1,489	5,957	1,351	0.23	2,359	0.40		1,489	5,957	1,309	0.22	2,240	0.38		
	2035 Without Project	~~110117~~,000		1,489	5,957	2,110~~330~~	0.3~~539~~	4,150	0.70		1,489	5,957	2,980	0.50	3,070~~23~~ ~~0~~	0.52~~54~~	LOS D	
	2035 With Project	129,000		1,489	5,957	2,490	0.42	5,500	**0.92**		1,489	5,957	4,390	0.74	3,610	0.61		Yes
	Project Traffic & V/C	~~1912~~,000				~~380160~~	~~0.0703~~	1,350	0.22				1,410	0.24	~~540380~~	~~0.0907~~		
13	Btw Templin Hwy and Lake Hughes Rd		4M							4M								
	2014 Count	70,000		1,489	5,957	1,351	0.23	2,359	0.40		1,489	5,957	1,309	0.22	2,240	0.38		
	2035 Without Project	~~111114~~,000		1,489	5,957	2,190~~410~~	0.37~~40~~	4,160	0.70		1,489	5,957	2,930	0.49	3,140~~30~~ ~~0~~	0.53~~55~~	LOS D	
	2035 With Project	130,000		1,489	5,957	2,530	0.42	5,500	**0.92**		1,489	5,957	4,350	0.73	3,640	0.61		Yes
	Project Traffic & V/C	~~1916~~,000				340~~120~~	0.0~~502~~	1,340	0.22				1,420	0.24	500~~340~~	0.08~~06~~		

Rows 70 and 71 of Table 5.10-25 on page 5.10-99 are hereby revised as follows:

SR-99																		
70	Btw Jct SR-58 W and California		4M							4M								
	2015 Count	104,110		2,246	8,985	3,848	0.43	6,276	0.70		2,246	8,985	4,004	0.45	6,694	0.75		
	2040 Without Project	125~~126~~,890		2,246	8,985	4,928~~808~~	0.55~~54~~	7,522~~8,0~~ ~~42~~	0.84~~90~~		2,246	8,985	5,393~~44~~ ~~3~~	0.60~~61~~	7,712~~70~~ ~~2~~	0.86	LOS E	
	2040 With Project	127,890		2,246	8,985	4,948	0.55	7,452	0.83		2,246	8,985	5,413	0.60	7,802	0.87		
	Project Traffic & V/C	~~21~~,000				20~~140~~	0.0~~1~~	(70~~590~~)	(0.01~~07~~)				20~~(30)~~	0.0~~(0.01)~~	90~~100~~	0.01		
71	Btw California and Jct SR-58 E		4M							4M								
	2015 Count	89,700		2,246	8,985	3,392	0.38	5,263	0.59		2,246	8,985	3,390	0.38	5,895	0.66		
	2040 Without Project	105~~106~~,855		2,246	8,985	4,090~~3,9 70~~	0.46~~44~~	6,325~~335~~	0.70~~71~~		2,246	8,985	4,354~~39 4~~	0.48~~49~~	6,712~~70 2~~	0.75	LOS E	
	2040 With Project	107,855		2,246	8,985	4,120	0.46	6,255	0.70		2,246	8,985	4,374	0.49	6,822	0.76		
	Project Traffic & V/C	~~21~~,000				30~~150~~	0.0~~2~~	(70~~80~~)	(0.0~~1~~)				~~(~~20~~)~~	0.01~~00~~	110~~120~~	0.01		

The following edits were identified subsequent to publication of the Final EIR and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors. No further edits have been made to this text. The last sentence of the last paragraph on page 5.10-103 is hereby revised as follows:

> MM 10-~~31~~ 27 requires fair share funding for the addition of one auxiliary lane in each direction between Lake Hughes and Parker roads, the addition of one HOV or HOT lane in each direction between Parker Road and SR-14, and MM 10-~~28~~ 24 for the strengthening and widening of the inside and outside shoulders of I-5 between the Fort Tejon and Grapevine Road and SR-138 and Lake Hughes Road interchanges.

The second through fourth rows of Table 5.10-27 on page 5.10-108 are hereby revised as follows:

Laval/Wheeler West NB Off Ramp								Laval/Wheeler Ridge West SB On Ramp							
Existing	1,450	1	1,500	50	0.03	80	0.05	Existing	6,200	1	1,500	270	0.18	330	0.22
2040 No Project	967	1	1,500	90	0.06	50	0.03	2040 No Project	7,667	1	1,500	430~~620~~	0.29~~41~~	430~~610~~	0.29~~41~~
2040 With Project	1,667	1	1,500	140	0.09	110	0.07	2040 With Project	9,067	1	1,500	710	0.47	650	0.43
Project Traffic & V/C	700			50	0.03	60	0.04	Project Traffic & V/C	1,400			28~~0~~90	0.18~~06~~	220~~40~~	0.14~~02~~
Laval/Wheeler East NB Off Ramp								Grapevine SB On Ramp Loop							
Existing	3,850	1	1,500	170	0.11	260	0.17	Existing	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2040 No Project	5,000~~100~~	1	1,500	470~~540~~	0.31~~36~~	330~~420~~	0.22~~28~~	2040 No Project	5,600	1	1,500	230	0.15	620	0.41
2040 With Project	7,000	1	1,500	580	0.39	470	0.31	2040 With Project	6,200	1	1,500	280	0.19	650	0.43
Project Traffic & V/C	2,000~~1,900~~			110~~40~~	0.08~~03~~	140~~50~~	0.09~~03~~	Project Traffic & V/C	600			50	0.04	30	0.02
Grapevine NB Off Ramp								Grapevine SB On Ramp							
Existing	1,750	1	1,500	50	0.03	40	0.03	Existing	1,200	1	1,500	40	0.03	50	0.03
2040 No Project	9~~11~~,467	1	1,500	620	0.41	1,010	0.67	2040 No Project	4,600	1	1,500	330	0.22	360	0.24
2040 With Project	11,667	1	1,500	680	0.45	1,070	0.71	2040 With Project	5,200	1	1,500	390	0.26	390	0.26
Project Traffic & V/C	2,400~~200~~			60	0.04	60	0.04	Project Traffic & V/C	600			60	0.04	30	0.02

The last row of Table 5.10-29 on page 5.10-124 is hereby revised as follows:

TABLE 5.10-29
ICU AND LOS SUMMARY – EXISTING (2014 & 2015) CONDITIONS AND CUMULATIVE (2035) WITH PROJECT COMPARISON (LOS ANGELES COUNTY SR-138 INTERSECTIONS)

Intersection	Jurisdiction	Control	Existing (2014 & 2015) Conditions				Cumulative (2035) With Project				ICU Difference	
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour			
			ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	AM	PM
1. Westerly Access & SR-138	LA County/ Caltrans	NA	NA[1]	NA[1]	NA[1]	NA[1]	0.98	E	1.20	F	NA[1]	NA[1]
2. Central Access & SR-138	LA County/ Caltrans	NA	NA[1]	NA[1]	NA[1]	NA[1]	1.11	F	1.22	F	NA[1]	NA[1]
3. 300th St W & SR-138[2]	LA County/ Caltrans	North leg stop	0.17	A	0.20	A	0.98	D	1.04	F	**0.81**	**0.84**
4. 290th St W & SR-138	LA County/ Caltrans	No control	0.18	A	0.20	A	0.86	D	1.04	F	**0.68**	**0.84**
7. 245th St W & SR-138	LA County/ Caltrans	South leg stop	0.17	A	0.19	A	1.84	F	1.86	F	**1.67**	**1.67**
9. 190th St W & SR-138	LA County/ Caltrans	North/South leg stop	0.17	A	0.19	A	1.65	F	1.81	F	**1.48**	**1.62**
11. 110th St W & SR-138	LA County/ Caltrans	North/South leg stop	0.17	A	0.21	A	1.68	F	1.83	F	**1.51**	**1.62**
13. 60th St W & SR-138[2]	LA County/ Caltrans	North/South leg stop	0.22	A	0.25	A	2.03	F	2.46	F	**1.81**	**2.21**

ICU = Intersection Capacity Utilization; LOS = level of service; NA – not applicable
[1] not an existing intersection
[2] denotes Los Angeles CMP route and cross street
Note: The SR-138 freeway/expressway configuration results in a reduced number of access locations to the SR-138 due to expressway intersection spacing requirements.
Boldface type – denotes significant impact.
Performance Criteria is outlined in Table 5.10-12 (Table 1-6 of Traffic Study).

Source: Stantec 2017 (Table 4-9).

The two full paragraphs on page 5.10-130 are hereby revised as follows:

> The on-site roadway network has been designed to accommodate projected traffic from proposed land uses. Impacts on the internal roadway system would be less than significant after mitigation. If improvements at Project access points on SR-138 are not constructed, impacts would be significant and unavoidable. Project buildout would result in significant traffic impacts on off-site roadways and freeways, including SR-138, I-5 mainline segments and interchange ramps, and arterial roadway intersections (see Table 5.10-~~30~~32 below). Mitigation measures have been identified to reduce all significant Project impacts, as listed in Table 5.10-~~31~~33, Mitigation Summary. In addition, MM 10-~~23~~20 would protect the right-of-way needed to widen and realign SR-138.
>
> Although mitigation measures identified for Caltrans facilities would reduce Project impacts, it is outside the control of the County of Los Angeles to implement these measures. The ~~CTIP~~ Traffic Mitigation Agreement or the Project Applicant's fair share contribution requirements in MM 10-3 and MMs 10-6 through 10-~~28~~24 and MMs 10-~~31~~27 through 10-4~~5~~41 will provide funding for the planning, design, and construction of certain improvements. MM 10-4 requires the Project Applicant to work to establish a funding program to collect fair share contributions from other projects for the required improvements. Compliance with these mitigation measures would reduce traffic impacts to a less than significant level. Potential Project impacts would be significant and unavoidable, however, if the improvements are not constructed by Caltrans because the County (as the Lead Agency) lacks jurisdiction and control over State highway facilities and cannot mandate the construction of improvements to these facilities.

Table 5.10-33 on pages 5.10-132 through 5.10-134 is hereby revised as follows:

TABLE 5.10-33
MITIGATION SUMMARY

Mitigation **SR-138**
Existing Plus Project Mitigation • Improve SR-138 to a four lane expressway from I-5 to 240th Street West and to a limited access conventional four-lane highway from 240th Street West to 190th Street West, with right-of-way reserved for a six-lane expressway between I-5 and 300th Street West or comparable improvements consistent with the Northwest 138 Corridor Improvement Project ~~(specific improvements pending Caltrans selection of a~~ preferred alternative~~)~~. (MM 10-6/Traffic Study MM-1) • Intersection improvements from the westerly access of the Centennial Specific Plan area to SR-14 ~~30th Street West or~~ comparable improvements consistent with the Northwest 138 Corridor Improvement Project ~~(specific improvements pending Caltrans selection of a~~ preferred alternative~~)~~: o Specific Plan Westerly Access and SR-138 o Specific Plan Central Access and SR-138 o 300th Street West and SR-138 ~~o 290th Street West and SR-138~~ o Margalo Drive and SR-138 o Three Points and SR-138 o ~~245th~~ 250th Street West and SR-138 o ~~230th~~ 210th Street West and SR-138 ~~o 190th Street West and SR-138~~ o 170th Street West and SR-138 ~~o 110th Street West and SR-138~~ o 90th Street West and SR-138 o 60th Street West and SR-138 ~~o 30th Street West and SR-138~~ **Cumulative Conditions Mitigation** • Dedicate right-of-way within the Project site at each site access location to accommodate the ultimate intersection or interchange configuration as determined by the Northwest 138 Corridor Improvement project ~~(specific improvements pending Caltrans selection of a~~ preferred alternative~~)~~ (MM 10-20~~23~~/Supplemental Traffic Study MM-18) • To accommodate up to 75 percent of the Project and anticipated cumulative development, ~~C~~contribute fair share of adding one lane in both directions (six lanes total) on SR-138 from I-5 to 300th Street West and one lane in both directions (four lanes total) on SR-138 from 300th Street West to the SR-14 interchange (in addition to above), or contribute fair share to the SR-138 improvements being advanced by Caltrans in the Northwest 138 Corridor Improvement Project ~~(specific improvements pending Caltrans selection of a~~ preferred alternative~~)~~. (MM 10-22~~24~~/Supplemental Traffic Study MM-19) • To accommodate 100 percent of the Project and anticipated cumulative development, ~~C~~contribute fair share of adding a second additional ~~one auxiliary~~ lane in both directions (six lanes total) on SR-138 from 300th Street West to approximately ½ mile east of 250th~~245th~~ Street West (in addition to above), or contribute fair share to the SR-138 improvements being advanced by Caltrans in the Northwest 138

TABLE 5.10-33
MITIGATION SUMMARY

Mitigation
Corridor Improvement Project ~~(specific improvements pending Caltrans selection of a~~ preferred alternative~~)~~. (MM 10-23~~25~~/Supplemental Traffic Study MM-20) • Fair share participation and/or contribution to the Kern COG RTP/SCS improvement projects on SR-58 between I-5 in Kern County and I-15 in San Bernardino County, which could include development of a high capacity goods movement facility along the SR-58 and/or E-220 corridors. (MM 10-24~~26~~/Traffic Study MM-21) • ~~Fair share participation and/or contribution to the SR-138 improvements to a limited access facility with grade-separated interchanges, consistent with the County's analysis of the AVAP, or fair share participation and/or contribution to the SR-138 improvements (freeway/ expressway or expressway/limited access conventional highway) being advanced by Caltrans in the Northwest 138 Corridor Improvement project (specific improvements pending Caltrans selection of a preferred alternative). (MM 10-27/Traffic Study MM-22)~~ • ~~Fair share participation and/or contribution to strengthening and widening the inside and outside shoulders of I-5 between the Fort Tejon and Grapevine Road interchanges and between the SR-138 and Lake Hughes Road interchanges. (MM 10-28/Traffic Study MM-23)~~
I-5
Cumulative Conditions Mitigation • On-Site Transportation Management Association (TMA) that would coordinate and manage the following programs: (MM 10-25~~29~~/Traffic Study MM-24) 1. Ride Share Program 2. Transit Program 3. Commuter Bus Program • Contribute fair share to planned freeway mainline improvements for the following segments: (MM 10-27~~31~~/Traffic Study MM-25) 1. Between Parker Road and SR-14 – add one HOV or HOT lane in each direction. 2. Between Lake Hughes and Parker – add one auxiliary lane in each direction. • Fair share participation and/or contribution to the development of a high capacity goods movement facility along the SR-58 and/or E-220 corridors between I-5 in Kern County and I-15 in San Bernardino County. (MM 10-24~~26~~/Traffic Study MM-26)
I-5/SR-138 Interchange
Existing Plus Project Mitigation • To mitigate the westbound SR-138 to SB I-5 connector ramp, construct one auxiliary lane to the I-5 mainline, or contribute fair share to the SR-138/I-5 connector ramps improvements being advanced by Caltrans in the Northwest 138 Corridor Improvement Project ~~(specific improvements pending Caltrans selection of a~~ preferred alternative~~)~~. (MM 10-18~~21~~/Traffic Study MM-16) **Cumulative Conditions Mitigation** • To mitigate the westbound SR-138 to SB I-5 connector ramp, contribute fair-share to the construction of two auxiliary lanes to the I-5 mainline, or contribute fair share to the SR-138/I-5 connector ramps improvements being advanced by Caltrans in the Northwest 138 Corridor Improvement Project ~~(specific improvements pending Caltrans selection of a~~ preferred alternative~~)~~. (MM 10-28~~32~~/Traffic Study MM-27) • To mitigate the northbound I-5 to eastbound SR-138 connector ramp, contribute fair share to the construction of two auxiliary lanes to the I-5 mainline before the northbound I-5 to eastbound SR-138 connector ramp, or contribute fair share to the SR-138/I-5 connector ramps improvements being

TABLE 5.10-33
MITIGATION SUMMARY

Mitigation
advanced by Caltrans in the Northwest 138 Corridor Improvement Project ~~(specific improvements pending Caltrans selection of a~~ preferred alternative~~)~~. (MM 10-29~~33~~/Traffic Study MM-28)
SR-14/SR-138 Interchange
Cumulative Conditions Mitigation • Contribute fair share to the construction of one mainline auxiliary lane and a second off-ramp lane for the SR-14 northbound off ramp to SR-138, or contribute fair share to the SR-138/SR-14 connector ramps improvements being advanced by Caltrans in the Northwest 138 Corridor Improvement Project ~~(specific improvements pending Caltrans selection of a~~ preferred alternative~~)~~. (MM 10-30~~34~~/Traffic Study MM-29) • Contribute fair share to the construction of a second lane on the SR-14 southbound on-ramp from SR-138, or contribute fair share to the SR-138/SR-14 connector ramps improvements being advanced by Caltrans in the Northwest 138 Corridor Improvement Project ~~(specific improvements pending Caltrans selection of a~~ preferred alternative~~)~~. (MM 10-31~~35~~/Traffic Study MM-30)
Off-Site Intersections
Existing Plus Project Mitigation • Contribute fair-share to recommended mitigation measures at the following intersections, or contribute fair share to the SR-138 improvements being advanced by Caltrans in the Northwest 138 Corridor Improvement Project ~~(specific improvements pending Caltrans selection of a~~ preferred alternative~~)~~: o Intersection improvements from the westerly access of the Centennial Specific Plan area to the SR-14 interchange ~~30th Street West~~ (MMs 10-7 through 10-17~~20~~/Supplemental Traffic Study MM-2 through MM-15) o I-5 SB Ramps and Sedona/The Old Road (Intersection 26) (MM 10-19~~22~~/Traffic Study MM-17)
Cumulative Conditions Mitigation • Contribute fair-share to recommended mitigation measures at the following intersections, or contribute fair share to the SR-138 improvements being advanced by Caltrans in the Northwest 138 Corridor Improvement Project ~~(specific improvements pending Caltrans selection of a~~ preferred alternative~~)~~: o SR-14 SB Ramps and SR-138 (Caltrans Intersection) (MM 10-32~~36~~/Supplemental Traffic Study MM-31) o SR-14 NB Ramps and SR-138 (Caltrans Intersection) (MM 10-33~~37~~/Supplemental Traffic Study MM-32) o I-5 NB Ramps and Lake Hughes (LA County/Caltrans Intersection) (MM 10-34~~38~~/Supplemental Traffic Study MM-33) o I-5 SB Ramps and Sedona/The Old Road (LA County/Caltrans Intersection) (MM 10-19~~22~~/Traffic Study MM-34) o I-5 SB Ramps and Magic Mountain (LA County/Caltrans Intersection) (MM 10-35~~39~~/Traffic Study MM-35) o I-5 NB Ramps and Magic Mountain (City of Santa Clarita/Caltrans Intersection) (MM 10-36~~40~~/Traffic Study MM-36) o I-5 SB Ramps and Valencia (LA County/Caltrans Intersection) (MM 10-37~~41~~/Traffic Study MM-37) o I-5 NB Ramps and Valencia (City of Santa Clarita/Caltrans Intersection) (MM 10-38~~42~~/Traffic Study MM-38) o I-5 SB Ramps and McBean (LA County/Caltrans Intersection) (MM 10-39~~43~~/Traffic Study MM-39)

TABLE 5.10-33
MITIGATION SUMMARY

Mitigation
o I-5 SB Ramps and Calgrove (City of Santa Clarita/Caltrans Intersection) (MM 10-40~~44~~/Traffic Study MM-40) o I-5 NB Ramps and Calgrove (City of Santa Clarita/Caltrans Intersection) (MM 10-41~~45~~/Traffic Study MM-41)
393SR: State Route; I: Interstate; Kern COG: Kern Council of Governments; RTP/SCS: Regional Transportation Plan/Sustainable Communities Strategy; HOT: high-occupancy toll; Caltrans: California Department of Transportation. Sources: ~~Stantec 2017 (Table 4-11).~~ Draft EIR Appendix 5.10-A (Traffic Study) and Final EIR Appendix 5.10-C (Supplemental Traffic Study)

The following edits were identified subsequent to publication of the Final EIR and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors. No further edits have been made to this text. The Impact Summary on page 5.10-139 is hereby revised as follows:

Impact Summary: The Project would not conflict with the Los Angeles County and Kern County CMPs. Impacts would be less than significant, and no mitigation is required beyond those previously identified (MMs 10-~~23~~ 20 through 10-~~28~~ 24 and MMs 10-~~31~~ 27 through 10-~~45~~ 41). However, if Caltrans does not implement the needed improvements identified under Threshold 10-1 above, impacts on freeways, arterial roadways, and intersections on the CMP highway network would be significant and unavoidable.

The following mitigation measures and accompanying text beginning with the last partial paragraph on page 5.10-145 to the end of the first full paragraph on page 5.10-157 are hereby revised as follows:

MM 10-3 The Project Applicant/Developer shall seek to enter into a ~~Centennial Transportation Improvement Program (CTIP)~~ Traffic Mitigation Agreement for Land Development Impacts to California State Transportation Facilities with Caltrans and shall comply with the terms the ~~CTIP agreement~~ Traffic Mitigation Agreement if approved and implemented. Compliance with the ~~CTIP~~ Traffic Mitigation Agreement shall constitute compliance with the mitigation measures for the Project's traffic impacts on the State highway system. Any required improvements that result from direct Project impacts (i.e., not from cumulative impacts), and are required on Caltrans-owned facilities, shall be implemented through a ~~CTIP~~ Traffic Mitigation Agreement. Any required improvements that result from cumulative traffic impacts may be implemented through payment of fair share fees.

MM 10-6 *(Supplemental Traffic Study MM-1)* To mitigate the Project's impacts to SR-138, the Project Applicant/Developer shall

comply with the terms of the ~~CTIP~~ Traffic Mitigation Agreement to improve SR-138 to a four lane expressway from I-5 to 240th Street West and to a limited access four lane conventional highway from 240th Street West to 190th Street West, with right-of-way reserved for a six-lane expressway between ~~I-5~~ Gorman Post Road and 300th Street West, or comparable improvements consistent with the Northwest 138 Corridor Improvement Project ~~(specific improvements pending Caltrans selection of a~~ preferred alternative~~)~~.

MM 10-7 *(Supplemental Traffic Study MM-2)* To mitigate the Project's impacts to SR-138, the Project Applicant/Developer shall comply with the terms of the ~~CTIP~~ Traffic Mitigation Agreement for the following intersection improvements at Specific Plan Westerly Access and SR-138:

- Widen SR-138 to a ~~four~~ six-lane ~~highway~~ expressway from westerly project entrance to 300th ~~290th~~ Street West, ~~with auxiliary lanes between intersections~~, resulting in three through lanes in the WB and EB directions.
- Construct intersection to include: two NB left-turn lanes, three NB through lanes and one NB right-turn lane.
- In the SB direction, construct two left turn lanes, three through lanes and ~~one free-flow~~ two right-turn lanes.
- In the EB direction, construct three left-turn lanes and one right-turn lane.
- In the WB direction, construct two left-turn lanes and ~~a free-flow~~ two right-turn lanes.
- Install traffic signal.

Or, contribute fair share to intersection improvements being advanced by Caltrans in the Northwest 138 Corridor Improvement Project ~~(specific improvements pending Caltrans selection of a~~ preferred alternative~~)~~.

MM 10-8 *(Supplemental Traffic Study MM-3)* To mitigate the Project's impacts to SR-138, the Project Applicant/Developer shall comply with the terms of the ~~CTIP~~ Traffic Mitigation Agreement for implementation of the following intersection improvements at Specific Plan Central Access and SR-138:

- Widen SR-138 to a ~~four~~ six-lane ~~highway~~ expressway from westerly project entrance to 300th ~~290th~~ Street

West, ~~with auxiliary lanes between intersections,~~ resulting in three through lanes in the WB and EB directions.

- In the NB and SB directions, construct two left-turn lanes, three through lanes and one right-turn lane.
- In the EB direction, construct two left-turn lanes and one right-turn lane.
- In the WB direction, construct two left-turn lanes and ~~a free-flow~~ two right-turn lanes.
- Install traffic signal and include SB and NB right-turn overlap phasing.

Or, contribute fair share to intersection improvements being advanced by Caltrans in the Northwest 138 Corridor Improvement Project ~~(specific improvements pending Caltrans selection of a~~ preferred alternative~~)~~.

MM 10-9 *(Supplemental Traffic Study MM-4)* To mitigate the Project's impacts to SR-138, the Project Applicant/Developer shall comply with the terms of the ~~CTIP~~ Traffic Mitigation Agreement for implementation of the following intersection improvements at 300th Street West and SR-138:

- Widen SR-138 to a ~~four~~ six-lane ~~highway~~ expressway from westerly project entrance to 300th ~~290th~~ Street West, ~~with auxiliary lanes between intersections,~~ resulting in three through lanes in the WB and EB directions.
- Construct two left-turn lanes and one right-turn lane in the EB direction and two left-turn lanes and dual right-turn lanes in the WB direction.
- In the NB direction, construct two left-turn lanes, three through lanes, and one right-turn lane.
- In the SB direction, construct two left turn lanes, three through lanes and one ~~free-flow~~ right-turn lane.
- Install traffic signal and include WB right-turn overlap phasing.

Or, contribute fair share to intersection improvements being advanced by Caltrans in the Northwest 138 Corridor Improvement Project ~~(specific improvements pending Caltrans selection of a~~ preferred alternative~~)~~.

~~**MM 10-10** *(Traffic Study MM-5)* To mitigate the Project's impacts to SR-138, the Project Applicant/Developer shall comply with the terms of the CTIP for implementation of the following intersection improvements at 290th Street West and SR-138:~~

- ~~Widen SR-138 to a four-lane highway from westerly project entrance to 290th Street West, with auxiliary lanes between intersections, resulting in three through lanes in the WB and EB directions.~~
- ~~Additional intersection improvements include: two EB left turn lanes, one WB right-turn lane, two SB left-turn and two SB right-turn lanes.~~
- ~~Install traffic signal.~~

~~Or, contribute fair share to intersection improvements being advanced by Caltrans in the Northwest 138 Corridor Improvement Project (specific improvements pending Caltrans selection of a preferred alternative).~~

MM 10-~~10~~11 *(Supplemental Traffic Study MM-6)* To mitigate the Project's impacts to SR-138, the Project Applicant/Developer shall comply with the terms of the ~~CTIP~~ Traffic Mitigation Agreement for implementation of the following intersection improvements at Margalo Drive and SR-138:

- Widen SR-138 to a four-lane ~~highway~~ expressway from 300th ~~290th~~ Street West to 240th ~~190th~~ Street West ~~with roadway augmentation at intersection, approximately ¼ mile in length for the west and east legs resulting in three through lanes in the WB and EB directions~~.
- Additional intersection improvements include: ~~one~~ two EB left turn lanes~~,~~ ~~and~~ one WB right-turn lane, one SB left-turn lane, and two SB right-turn lanes.
- Install traffic signal.

Or, contribute fair share to intersection improvements being advanced by Caltrans in the Northwest 138 Corridor Improvement Project ~~(specific improvements pending Caltrans selection of a~~ preferred alternative~~)~~.

MM 10-11~~12~~ *(Supplemental Traffic Study MM-7)* To mitigate the Project's impacts to SR-138, the Project Applicant/Developer shall comply with the terms of the ~~CTIP~~ Traffic Mitigation Agreement for implementation of the following intersection improvements at Three Points and SR-138:

- Widen SR-138 to a four-lane ~~highway~~ expressway from 300th ~~290th~~ Street West to 240th ~~190th~~ Street West ~~with roadway augmentation at intersection, approximately ¼ mile in length for the west and east legs~~ resulting in ~~three~~ two through lanes in the WB and EB directions.
- Additional improvements include adding one NB left-turn lane~~, and~~ one SB left turn lane and one SB right turn lane.

Or contribute fair share to intersection improvements being advanced by Caltrans in the Northwest 138 Corridor Improvement Project ~~(specific improvements pending Caltrans selection of a~~ preferred alternative~~)~~.

MM 10-12~~13~~ *(Supplemental Traffic Study MM-8)* To mitigate the Project's impacts to SR-138, the Project Applicant/Developer shall comply with the terms of the ~~CTIP~~ Traffic Mitigation Agreement for implementation of the following intersection improvements at 250~~245~~th Street West and SR-138:

- Widen SR-138 to a four-lane expressway ~~highway~~ from 300th ~~290th~~ Street West to 240th ~~190th~~ Street West ~~with roadway augmentation at intersection, approximately ¼ mile in length for the west and east legs~~ resulting in ~~three~~ two through lanes in the WB and EB directions.
- Additional improvements include adding one ~~NB left-turn lane and one~~ SB left turn lane, one EB left-turn lane, one WB U-turn lane and one dedicated ~~EB~~ WB right-turn lane.
- Install traffic signal.

Or, contribute fair share to intersection improvements being advanced by Caltrans in the Northwest 138 Corridor Improvement Project ~~(specific improvements pending Caltrans selection of a~~ preferred alternative~~)~~.

MM 10-13~~14~~ *(Supplemental Traffic Study MM-9)* To mitigate the Project's impacts to SR-138, the Project Applicant/Developer shall comply with the terms of the ~~CTIP~~ Traffic Mitigation Agreement

for implementation of the following intersection improvements at 210th ~~230th~~ Street West and SR-138:

- Widen SR-138 to a four-lane limited access conventional highway from 240th ~~290~~th Street West to 190th Street West.
- Additional improvements include one SB left-turn lane, one ~~SB~~ NB ~~right~~ left-turn lane, ~~and~~ one EB left-turn lane, one EB right-turn lane, and one WB left-turn lane.

Or, contribute fair share to intersection improvements being advanced by Caltrans in the Northwest 138 Corridor Improvement Project ~~(specific improvements pending Caltrans selection of a~~ preferred alternative~~)~~.

~~**MM 10-15** *(Traffic Study MM-10)* To mitigate the Project's impacts to SR-138, the Project Applicant/Developer shall comply with the terms of the CTIP for implementation of the following intersection improvements at 190th Street West and SR-138:~~

- ~~Widen SR-138 to a four-lane highway from 290th Street West to 190th Street West with roadway augmentation at intersection, approximately ¼ mile in length for the west and east legs resulting in three through lanes in the WB and EB directions.~~
- ~~Additional improvements include adding one EB left-turn lane, one WB left-turn lane, one NB left-turn lane and one SB left turn lane and one dedicated EB right-turn lane.~~
- ~~Install traffic signal.~~

~~Or, contribute fair share to intersection improvements being advanced by Caltrans in the Northwest 138 Corridor Improvement Project (specific improvements pending Caltrans selection of a preferred alternative).~~

MM 10-14~~16~~ *(Supplemental Traffic Study MM-11)* To mitigate the Project's impacts to SR-138, the Project Applicant/Developer shall comply with the terms of the ~~CTIP~~ Traffic Mitigation Agreement for implementation of the following intersection improvements at 170th Street West and SR-138:

- Roadway augmentation at intersection, approximately ¼ mile in length for the east and west legs, resulting in 2

through lanes in the WB and EB directions at the intersection.

- Additional improvements include one EB left-turn lane, one WB left-turn lane, one NB left-turn lane and one SB left-turn lane.

Or, contribute fair share to intersection improvements being advanced by Caltrans in the Northwest 138 Corridor Improvement Project ~~(specific improvements pending Caltrans selection of a~~ preferred alternative~~)~~.

~~**MM 10-17** *(Traffic Study MM-12)* To mitigate the Project's impacts to SR-138, the Project Applicant/Developer shall comply with the terms of the CTIP for implementation of the following intersection improvements at 110th Street West and SR-138:~~

- ~~Roadway augmentation at intersection, approximately ¼ mile in length for the east and west legs, resulting in 2 through lanes in the WB and EB directions at the intersection.~~
- ~~Additional improvements include: one EB left-turn lane, one WB left-turn lane, two NB left-turn lanes, one SB left-turn lane and two SB right-turn lanes.~~
- ~~Install traffic signal.~~

~~Or, contribute fair share to intersection improvements being advanced by Caltrans in the Northwest 138 Corridor Improvement Project (specific improvements pending Caltrans selection of a preferred alternative).~~

MM 10-15~~18~~ *(Supplemental Traffic Study MM-13)* To mitigate the Project's impacts to SR-138, the Project Applicant/Developer shall comply with the terms of the ~~CTIP~~ Traffic Mitigation Agreement for implementation of the following intersection improvements at 90th Street West and SR-138:

- Roadway augmentation at intersection, approximately ¼ mile in length for the east and west legs, resulting in 2 through lanes in the WB and EB directions at the intersection.
- Additional improvements include: ~~one~~ two EB left-turn lanes, one EB right-turn lane, one WB left-turn lane, one WB right-turn lane, one NB left-turn lane and one SB left-turn lane.

Or, contribute fair share to intersection improvements being advanced by Caltrans in the Northwest 138 Corridor Improvement Project ~~(specific improvements pending Caltrans selection of a~~ preferred alternative~~)~~.

MM 10-16~~19~~ *(Supplemental Traffic Study MM-14)* To mitigate the Project's impacts to SR-138, the Project Applicant/Developer shall comply with the terms of the ~~CTIP~~ Traffic Mitigation Agreement for implementation of the following intersection improvements at 60th Street West and SR-138:

- Roadway augmentation at intersection, approximately ¼ mile in length for the east and west legs, resulting in 2 through lanes in the WB and EB directions at the intersection.
- Additional improvements include: one EB left-turn lane, one EB right-turn lane, one WB left-turn lane, one WB right-turn lane, one NB left-turn lane and one SB left-turn lane.
- Install traffic signal.

Or, contribute fair share to intersection improvements being advanced by Caltrans in the Northwest 138 Corridor Improvement Project ~~(specific improvements pending Caltrans selection of a~~ preferred alternative~~)~~.

MM 10-17~~20~~ *(Supplemental Traffic Study MM-15)* To mitigate the Project's impacts to SR-138, the Project Applicant/Developer shall comply with the terms of the ~~CTIP~~ Traffic Mitigation Agreement for implementation of the following intersection improvements at ~~30th Street West~~ the SR-14 and SR-138 interchange:

- ~~Roadway augmentation at intersection, approximately ¼ mile in length for the east and west legs, resulting in 2 through lanes in the WB and EB directions at the intersection.~~
- ~~Additional improvements include adding one EB left-turn lane and one WB left-turn lane.~~
- Install traffic signals at the NB off-ramp and the SB off-ramp.

Or, contribute fair share to intersection improvements being advanced by Caltrans in the Northwest 138 Corridor Improvement Project ~~(specific improvements pending Caltrans selection of a~~ preferred alternative~~)~~.

MM 10-18~~21~~ *(Traffic Study MM-16)* To provide adequate capacity at the I-5/SR-138 interchange, the Project Applicant/Developer shall either (1) comply with the terms of the ~~CTIP~~ Traffic Mitigation Agreement or (2) contribute fair share funding toward the following ramp improvement at I-5/SR-138:

- Addition of one auxiliary lane at the connector ramp from westbound SR-138 to southbound I-5 for existing plus Project conditions

MM 10-19~~22~~ *(Traffic Study MM-17 and MM-34)* To provide adequate capacity at The Old Road at I-5 SB Ramps/Sedona intersection, the Project Applicant/Developer shall either (1) comply with the terms of the ~~CTIP~~ Traffic Mitigation Agreement or (2) contribute fair share funding toward the addition of a second southbound left-turn lane from The Old Road to the I-5 Southbound On-Ramp.

MM 10-20~~23~~ *(Supplemental Traffic Study MM-18)* To mitigate the increase of side-street delay for the existing adjacent off-site areas and for planned on-site side streets along SR-138, the Project Applicant/Developer shall either (1) comply with the terms of the ~~Centennial Transportation Improvement Program (CTIP)~~ Traffic Mitigation Agreement or (2) dedicate right-of-way within the project site at each site access location to accommodate the ultimate intersection or interchange configuration to be determined by the Northwest Corridor Improvement Project ~~(specific improvements pending Caltrans selection of a~~ preferred alternative~~)~~ at the following SR-138 intersections:

- Westerly Access
- Central Access
- 300th Street West
- ~~290th Street West~~

MM 10-21 *(Supplemental Traffic Study MM-22)* To provide adequate on- and off-site capacity to accommodate up to 10 percent of the Project and anticipated cumulative development, the Project Applicant/Developer shall comply with the terms of the Traffic Mitigation Agreement for the following SR-138 intersection improvements for site access:

- Westerly Access: Provide one EB left-turn lane, one EB through lane, one EB right-turn lane, one WB left-turn

lane, one WB through lane, one WB right-turn lane, one NB left-turn lane, one shared NB through/right lane, one SB left-turn lane, and one shared SB through/right lane. Install traffic signal.

- Central Access: Provide one EB left-turn lane, one EB through lane, one EB right-turn lane, one WB left-turn lane, one WB through lane, one WB right-turn lane, one NB left-turn lane, one NB through lane, one NB right-turn lane, one SB left-turn lane, one SB through lane, and one SB right-turn lane. Install traffic signal.
- 300th Street West: Provide one EB left-turn lane, one EB through lane, one EB right-turn lane, one WB left-turn lane, one WB through lane, one WB right-turn lane, one NB left-turn lane, one shared NB through/right lane, one SB left-turn lane, and one shared SB through/right lane. Install traffic signal.
- 190th Street West: Provide one EB left-turn lane, one EB through lane, one WB through lane, one WB right-turn lane, one SB left-turn lane, and one SB right lane.

MM 10-2224 *(Supplemental Traffic Study MM-19)* To provide adequate on- and off-site capacity to accommodate up to 75 percent of the Project and anticipated cumulative development, the Project Applicant/Developer shall either (1) comply with the terms of the ~~CTIP~~ Traffic Mitigation Agreement or (2) contribute fair share funding toward the widening of SR-138, including:

- Addition of ~~an auxiliary~~ one additional lane in each direction (six lane~~s total~~ freeway) from I-5 to Gorman Post Road
- Addition of two additional lanes in each direction (six lane expressway) from Gorman Post Road to 300th Street West
- Addition of one additional lane in each direction (four lane expressway) from 300th Street West to 240th Street West
- Addition of one additional lane in each direction (four lane limited access conventional highway) from 240th Street West to the SR-14 interchange

MM 10-2325 *(Supplemental Traffic Study MM-20)* To provide adequate on- and off-site capacity to accommodate 100 percent of the Project and anticipated cumulative development, the Project

Applicant/Developer shall either (1) comply with the terms of the ~~CTIP~~ Traffic Mitigation Agreement or (2) contribute fair share funding toward the widening of SR-138, including:

- Addition of ~~an auxiliary~~ a second additional lane in each direction (six lanes total) from 300th Street West to approximately ½ mile east of 250th ~~245th~~ Street West
- Construct additional intersection turn lanes at the following SR-138 intersections:
  - Westerly Project Access
  - 300th Street West
  - Margalo Drive
  - Three Points Road
  - 60th Street West

MM 10-24~~26~~ *(Traffic Study MM-21 and MM-26)* To provide adequate capacity to the I-5 mainline freeway, the Project Applicant/Developer shall either (1) comply with the terms of the ~~CTIP~~ Traffic Mitigation Agreement or (2) contribute fair share funding towards RTP/SCS improvement projects on SR-58 between I-5 in Kern County and I-15 in San Bernardino County, as verified by the County in consultation with the Kern COG and Caltrans. Improvements could include development of a high capacity goods movement facility along the SR-58 and/or E-220 corridors.

~~**MM 10-27** *(Traffic Study MM-22)* To provide adequate capacity on SR-138, the Project Applicant/Developer shall comply with the terms of the CTIP for the SR-138 improvements to a limited access facility with grade-separated interchanges, consistent with the County's analysis of the AVAP, or fair share participation and/or contribution to the SR-138 improvements (freeway/expressway or expressway/limited access conventional highway) being advanced by Caltrans in the Northwest 138 Corridor Improvement Project (specific improvements pending Caltrans selection of a preferred alternative).~~

~~**MM 10-28** *(Traffic Study MM-23)* To provide adequate capacity to the I-5 mainline freeway, the Project Applicant/Developer shall either (1) comply with the terms of the CTIP or (2) contribute fair~~

~~share funding towards the following planned improvements to I-5:~~

- ~~I-5 between Fort Tejon and Grapevine Road and between SR-138 and Lake Hughes Road interchanges: Strengthening and widening the inside and outside shoulders of I-5.~~

MM 10-25~~29~~ *(Traffic Study MM-24)* The Project Applicant/Developer shall implement the Mobility Plan, included as Section 3.2 of the Specific Plan, which provides an extensive system of sidewalks, greenway trails, community trails, a dedicated transit easement, and two transit hubs to serve as alternative means of transportation on the Project site. The Mobility Plan also requires creation and ongoing operation of a Transportation Management Association (TMA) to implement ongoing transportation improvements and programs.

The Project Applicant/Developer, through the required implementation of the Mobility Plan, shall:

- Reinforce and serve the Land Use Plan;
- Provide future residents, visitors and employees with multiple modes of transit/non-single occupancy vehicle (non-SOV) accessibility for internal and external trips ~~by future residents and visitors~~;
- Provide options to reduce vehicle trips and emissions by linking effective travel demand management with transportation systems and parking policies;
- Provide residents and employees on the Project site with multiple modes of transportation options (i.e., walk, bike, public transit, private auto, car share, bike share, etc.);
- Provides for 80 percent on average, but no less than 50 percent of each Village's residential units to be located within one-half mile of a Village center that includes retail and service uses;
- Provide parks within a 5-minute walk (0.25 mile) of 80 percent of all residential units;
- Provide a transit route easement no less than 25 feet wide in the Centennial Commerce District connecting the Town Center, Business Park, and Industrial/Civic areas and also northerly connecting to the Village Five Core;

- Require TMA implementation of a combination of transit and transportation measures to ~~reduce~~ ensure that a minimum of 30 percent of total daily internal on-site trips are completed by using transit modes other than ~~single-occupancy automobile~~ SOV use ~~by 30 percent in relation to standard ITE-generation rates for the overall Project~~; ~~and~~
- Require TMA implementation of a combination of transit and transportation measures to ~~reduce~~ ensure that a minimum of 20 percent of total off-site peak hour commutes to and from the Project site are completed by using transit modes other than SOVs ~~single-occupancy automobiles by 20 percent~~.;
- Require TMA implementation of a program to coordinate with automotive dealers on the Project site to promote CNG, electric, and hybrid electric vehicles~~.~~;
- Require TMA oversight of requirement for service fleet vehicles for agencies or businesses located on-site to be alternative fuel vehicles to the maximum extent feasible, as determine by the Project Applicant/Developer~~.~~; and
- Require TMA implementation of a combination of measures to provide adequate temporary bike parking during large public events conducted at civic center, large amphitheaters, fairgrounds or athletic stadium uses that may be permitted, temporarily permitted, or conditionally permitted on the Project site pursuant to the Specific Plan. Such measures may include, but are not limited to, providing valet bike parking, temporarily anchored bike parking racks, or a secured temporary bike parking enclosure.

The Circulation Plan sets forth requirements for roadway classifications; intersection controls; and traffic calming measures. Where approved by the California Department of Transportation (Caltrans) and the County and where maintenance and durability costs are comparable to traditional materials, use "cool" pavement materials, which reduce heat island effect.

MM 10-2630 *(Traffic Study MM-24)* Each component of the Mobility Plan incorporates Transportation Demand Management (TDM) features to reduce dependence on the automobile, provide for a more efficient use of transportation resources among Project occupants, and thereby reduce pollutant emissions. Related to

this is the creation and ongoing operation of a Transportation Management Association (TMA) to fund and manage the operation of ongoing transportation programs, including but not limited to transit and on-demand services.

The key TDM elements that are inherent in the overall Mobility Plan are:

- Sidewalks, greenway trails, and community trails that link residential, schools, shopping, and employment areas;
- Small- to medium-sized streets and blocks that allow for shorter walking distances to retail, parks, schools, and other destinations;
- Pedestrian environments incorporated with public streets;
- Transit route easement connecting the residential and commerce areas;
- Parking behind buildings to encourage walking in retail areas along street frontage; and
- Parks within 0.25 mile of 80 percent of all residential units.

MM 10-2731 *(Traffic Study MM-25)* To provide adequate capacity to the I-5 mainline freeway, the Project Applicant/Developer shall either (1) comply with the terms of the ~~CTIP~~ Traffic Mitigation Agreement or (2) contribute fair share funding towards the following planned improvements to I-5:

- I-5 between Lake Hughes and Parker: Addition of one auxiliary lane in each direction.
- I-5 between Parker Road and SR-14: Addition of one HOV or HOT lane in each direction.

MM 10-2832 *(Traffic Study MM-27)* To provide adequate capacity at the I-5/SR-138 interchange, the Project Applicant/Developer shall either (1) comply with the terms of the ~~CTIP~~ Traffic Mitigation Agreement or (2) contribute fair share funding toward the following ramp improvement at I-5/SR-138:

- Addition of two auxiliary lanes at the connector ramp from westbound SR-138 to southbound I-5 for ~~Year 2035~~ cumulative buildout conditions.

MM 10-29~~33~~ *(Traffic Study MM-28)* To provide adequate capacity at the I-5/SR-138 interchange, the Project Applicant/Developer shall either (1) comply with the terms of the ~~CTIP~~ Traffic Mitigation Agreement or (2) contribute fair share funding toward the following ramp improvement at I-5/SR-138:

- Addition of two auxiliary lanes at the connector ramp mainline before the northbound I-5 to eastbound SR-138 connector ramp.

MM 10-30~~34~~ *(Traffic Study MM-29)* To provide adequate capacity at the SR-14/SR-138 interchange, the Project Applicant/Developer shall either (1) comply with the terms of the ~~CTIP~~ Traffic Mitigation Agreement or (2) contribute fair share funding toward the following ramp improvement at SR-14/SR-138:

- Construction of one auxiliary lane and a second off-ramp lane for the SR-14 northbound off ramp to SR-138.

MM 10-31~~35~~ *(Traffic Study MM-30)* To provide adequate capacity at the SR-14/SR-138 interchange, the Project Applicant/Developer shall either (1) comply with the terms of the ~~CTIP~~ Traffic Mitigation Agreement or (2) contribute fair share funding toward the following ramp improvement at SR-14/SR-138:

- Construction of a second lane on the SR-14 southbound on-ramp from SR-138.

MM 10-32~~36~~ *(Supplemental Traffic Study MM-31)* To provide adequate capacity at the SR-14 SB Ramps and SR-138 interchange, the Project Applicant/Developer shall (1) comply with the terms of the ~~CTIP~~ Traffic Mitigation Agreement for the reconfiguration of the interchange to include two eastbound through lanes and ~~three~~ two westbound through lanes~~. In the southbound direction, add a second right-turn lane;~~ and install a traffic signal ~~and include right-turn overlap phasing~~ or (2) contribute fair share funding for intersection improvements being advanced by Caltrans in the Northwest 138 Corridor Improvement Project ~~(specific improvements pending Caltrans selection of a~~ preferred alternative~~)~~.

MM 10-33~~37~~ *(Supplemental Traffic Study MM-32)* To provide adequate capacity at SR-14 NB Ramps and SR-138 interchange, the Project Applicant/Developer shall (1) comply with the terms of the ~~CTIP~~ Traffic Mitigation Agreement for the reconfiguration of the interchange to include two eastbound through lanes and two westbound through lanes ~~and, in the northbound direction,~~

~~add two left-turn lanes~~ and a traffic signal or (2) contribute fair share funding for intersection improvements being advanced by Caltrans in the Northwest 138 Corridor Improvement Project ~~(specific improvements pending Caltrans selection of a~~ preferred alternative~~)~~.

MM 10-34~~38~~ *(Traffic Study MM-33)* To provide adequate capacity at Lake Hughes Road at I-NB Ramps intersection, the Project Applicant/Developer shall (1) comply with the terms of the ~~CTIP~~ Traffic Mitigation Agreement or (2) contribute fair share funding towards planned improvements to I-5 for the addition of one lane to the northbound off-ramp and restripe the configuration to include one left-turn, one shared left/right-turn lane, and one dedicated right-turn lane.

MM 10-35~~39~~ *(Traffic Study MM-35)* To provide adequate capacity at the Magic Mountain Parkway at I-5 SB Ramps intersection, the Project Applicant/Developer shall (1) comply with the terms of the ~~CTIP~~ Traffic Mitigation Agreement or (2) contribute fair share funding towards planned improvements to I-5 for the restriping of the southbound off-ramp to provide two left-turn lanes, one shared left-turn/through lane, and one right-turn lane.

MM 10-36~~40~~ *(Traffic Study MM-36)* To provide adequate capacity at the Magic Mountain Parkway at I-5 NB Ramps intersection, the Project Applicant/Developer shall (1) comply with the terms of the ~~CTIP~~ Traffic Mitigation Agreement or (2) contribute fair share funding towards planned improvements to I-5 for the conversion of the shared through/right-turn lane to a shared left/through/right-turn lane.

MM 10-37~~41~~ *(Traffic Study MM-37)* To provide adequate capacity at the Valencia Road at I-5 SB Ramps intersection, the Project Applicant/Developer shall either (1) comply with the terms of the ~~CTIP~~ Traffic Mitigation Agreement or (2) contribute fair share funding toward the striping of a third westbound through lane.

MM 10-38~~42~~ *(Traffic Study MM-38)* To provide adequate capacity at the Valencia Road at I-5 NB Ramps intersection, the Project Applicant/Developer shall either (1) comply with the terms of the ~~CTIP~~ Traffic Mitigation Agreement or (2) contribute fair share funding toward the traffic signal modification to add a northbound right-turn overlap phase.

MM 10-39~~43~~ *(Traffic Study MM-39)* To provide adequate capacity at the McBean Parkway at I-5 SB Ramps intersection, the Project

Applicant/Developer shall either (1) comply with the terms of the ~~CTIP~~ Traffic Mitigation Agreement or (2) contribute fair share funding toward the restriping of the dedicated westbound right-turn lane to a shared through/right-turn lane.

MM 10-~~40~~44 *(Traffic Study MM-40)* To provide adequate capacity at the Calgrove Road at I-5 SB Ramps intersection, the Project Applicant/Developer shall either (1) comply with the terms of the ~~CTIP~~ Traffic Mitigation Agreement or (2) contribute fair share funding toward adding a second eastbound through lane and a de-facto right-turn lane and a second through lane in the westbound direction.

MM 10-~~41~~45 *(Traffic Study MM-41)* To provide adequate capacity at the Calgrove Road at I-5 NB Ramps intersection, the Project Applicant/Developer shall either (1) comply with the terms of the ~~CTIP~~ Traffic Mitigation Agreement or (2) contribute fair share funding toward restriping to add a westbound de facto right-turn lane.

Since Caltrans has ~~deferred the selection of a preferred build alternative for the Northwest 138 Corridor Improvement Project and has also~~ reserved the right to determine the specific types of intersection controls at the time the improvements occur ~~and MMs 10-6 through 10-27 and MMs 10-31 through 10-35 would mitigate the Project's impacts and cumulative impacts on the SR-138~~, ~~these~~ mitigation measures related to intersection controls on SR-138 are subject to change pending Caltrans determination of the specific types of intersection controls that will be implemented ~~preferred 138 Corridor alternative~~. T~~herefore, t~~he Centennial Project will contribute its fair share and/or contribute towards the cost of the Northwest 138 Corridor Improvement Project preferred Alternative 2. ~~for the alternative ultimately selected by Caltrans and Metro.~~ Refer to the Traffic Study (Draft EIR Appendix 5.10-A) and the Supplemental Traffic Study (Final EIR Appendix 5.10-C) for additional detail on the traffic mitigation.

Under MM 10-25~~29~~, the Project is required to reduce use of automobiles by implementing PDFs and TDM measures to be administered and monitored by a Transportation Management Association. These mandatory mitigation measures require ~~the reduction of single-occupancy automobile use for~~ that a minimum of 20 percent of total peak morning and afternoon off-site commute~~s~~ trips and a minimum of 30 percent of total on-site internal trips be completed by using transit modes other than ~~20 percent, and require the reduction of~~ single occupancy automobile use ~~within the Project site by 30 percent~~. The traffic analysis above conservatively assumes full trip (i.e., single occupancy automobile) volumes on- and off-site, and thus, is conservative and actual traffic volumes from the Project are anticipated to be lower.

5.10.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Mitigation measures have been established to reduce the Project's significant impacts on traffic access and circulation. However, these mitigation measures call for improvements to Caltrans facilities, which are outside the control of the County of Los Angeles and the Project Applicant. Implementation of the ~~CTIP~~ Traffic Mitigation Agreement or fair share contributions by the Project Applicant in accordance with MM 10-3, MMs 10-6 through 10-24~~28~~, and MMs 10-27~~31~~ through 10-41~~45~~ will ensure that the Project provides fair share funding required to mitigate potential Project impacts. Implementation of a traffic mitigation fee program (MM 10-4) would provide a mechanism for providing fair share contributions from other projects and future activity affecting State facilities.

The following further edits were identified subsequent to publication of the Final EIR and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors. No further edits have been made to this text. MM 10-3 on page 5.10-145 of the Draft EIR and MM 10-25, which starts on page 5.10-152 of the Draft EIR, are hereby revised as follows:

MM 10-3 The Project Applicant/Developer shall seek to enter into a Traffic Mitigation Agreement for Land Development Impacts to California State Transportation Facilities ~~with~~ by and between the Project Applicant/Developer and Caltrans, and during the term of such agreement shall comply with the terms ~~the Traffic Mitigation Agreement if approved and implemented~~ and conditions thereof. Compliance with the Traffic Mitigation Agreement shall constitute compliance with the mitigation measures for the Project's traffic impacts on the State highway system. Any required improvements that result from direct Project impacts (i.e., not from cumulative impacts), and are required on Caltrans-owned facilities, shall be implemented through a Traffic Mitigation Agreement. Any required improvements that result from cumulative traffic impacts may be implemented through payment of fair share fees.

MM 10-25 *(Traffic Study MM-24)* The Project Applicant/Developer shall implement the Mobility Plan, included as Section 3.2 of the Specific Plan, which provides an extensive system of sidewalks, greenway trails, community trails, a dedicated transit easement, and two transit hubs to serve as alternative means of transportation on the Project site. The Mobility Plan also requires creation and ongoing operation of a Transportation Management Association (TMA) to implement ongoing transportation improvements and programs.

The Project Applicant/Developer, through the required implementation of the Mobility Plan, shall:

- Reinforce and serve the Land Use Plan;
- Provide future residents, visitors and employees with multiple modes of transit/non-single occupancy vehicle (non-SOV) accessibility for internal and external trips;
- Provide options to reduce vehicle trips and emissions by linking effective travel demand management with transportation systems and parking policies;
- Provide residents and employees on the Project site with multiple modes of transportation options (i.e., walk, bike, public transit, private auto, car share, bike share, etc.);
- Provide for 80 percent on average, but no less than 50 percent of each Village's residential units to be located within one-half mile of a Village Center that includes retail and service uses;
- Provide parks within a 5-minute walk (0.25 mile) of 80 percent of all residential units;
- Provide a transit route easement no less than 25 feet wide in the Centennial Commerce District connecting the Town Center, Business Park, and Industrial/Civic areas and also northerly connecting to the Village Five Core;
- Require TMA implementation of a combination of transit and transportation measures to ensure that a minimum of 30 percent of total daily internal on-site trips are completed by using transit modes other than SOV use, including on-demand pooled car or multi-passenger vehicle service;
- Require TMA implementation of a combination of transit and transportation measures to ensure that a minimum of 20 percent of total off-site peak hour commutes to and from the Project site are completed by using transit modes other than SOVs, which shall include requiring the TMA to provide am and pm peak hour demand-based multi-passenger transit services for Project residents and employees that link the Project to the nearest Metrolink station and commuter transit hub to the south (currently Santa Clarita) and the east (currently Palmdale), and to the north (Tejon Mountain Village, Tejon Commerce Center, and Grapevine), and to other commuter destinations as warranted by consumer demand;
- Require TMA implementation of a program to coordinate with automotive dealers on the Project site to promote battery electric, or hydrogen fuel cell (collectively

"electric") vehicles; at minimum, this program shall include preferences for dealers offering bulk discounts or other financial incentives;

- Require TMA oversight of requirement for service fleet vehicles for agencies or businesses located on-site to be electric vehicles to the maximum extent feasible, as determine by the Project Applicant/Developer in consultation with the County, or other future vehicle technologies as may be developed and comply with California's air quality, greenhouse gas, and climate change mandates, and which meet the performance and affordability needs of Project employees and residents as determined by the Project Applicant/Developer in consultation with the County (collectively, "Future Vehicle Fleet" or "FVF"); and
- Require TMA implementation of a combination of measures to provide adequate temporary bike or personal electric vehicle (e.g., scooter) parking during large public events conducted at civic center, large amphitheaters, fairgrounds or athletic stadium uses that may be permitted, temporarily permitted, or conditionally permitted on the Project site pursuant to the Specific Plan. Such measures may include, but are not limited to, providing valet bike parking, temporarily anchored bike parking racks, or a secured temporary bike parking enclosure.

The Circulation Plan sets forth requirements for roadway classifications; intersection controls; and traffic calming measures. Where approved by the California Department of Transportation (Caltrans) and the County and where maintenance and durability costs are comparable to traditional materials, use "cool" pavement materials, which reduce heat island effect.

Section 5.11 – Air Resources

Table 5.11-21 on page 5.11-56 is hereby revised as follows:

ESTIMATED ANNUAL MID-PROJECT COMBINED EMISSIONS (SCAQMD UNITS [LBS/DAY])

Source	Emissions (lbs/day)					
	VOC	**NOx**	**CO**	**SOx**	**PM10**	**PM2.5**
Unmitigated Emissions						
Year 18 Construction	**94**	**137**	207	1	73	33
Year 18 Operations	**1,319**	**761**	**3,948**	13	**1,430**	**410**
Combined Year ~~11~~18 Emissions	**1413**	**898**	**4155**	2	**1503**	**443**
SCAQMD Operations Thresholds	55	55	550	150	150	55
Exceeds Threshold	**Yes**	**Yes**	**Yes**	No	**Yes**	**Yes**
Mitigated Emissions						
Year ~~11~~18 Construction	**75**	43	272	1	37	14
Year ~~11~~18 Operations	**1,319**	**761**	**3,948**	13	**1,430**	**410**
Combined Year ~~11~~18 Emissions – construction	**1,394**	**804**	**4,220**	2	**1,467**	**424**
SCAQMD Operations Thresholds	55	55	550	150	150	55
Exceeds Threshold	**Yes**	**Yes**	**Yes**	No	**Yes**	**Yes**

lbs/day: pounds per day; VOC: volatile organic compounds; NOx: nitrogen oxides; CO: carbon monoxide; SOx: sulfur oxides; PM10: respirable particulate matter with a diameter of 10 microns or less; PM2.5: fine particulate matter with a diameter of 2.5 microns or less.

Note: Totals may not add due to rounding.

Bold indicates emissions exceeding threshold

Sources: SCAQMD 2015 (thresholds). Emissions calculations can be found in Appendix 5.11-A

The first sentence of the second full paragraph on page 5.11-73 is hereby revised as follows:

> Because the Project would generate traffic on SR-138, the receptors evaluated included 3 existing residences within 500 feet of SR-138, as well as the proposed residential and institutional areas that could be located within ~~150~~ 500 feet of the freeway.

MM 11-2 on pages 5.11-78 and 5.11-79 is hereby revised as follows:

> **MM 11-2** The Project's plans and specifications shall include the following measures to minimize nitrogen oxide (NOx) and volatile organic compound (VOC) emissions during construction:

- All off-road diesel-powered construction equipment greater than 50 horsepower shall meet U.S. Environmental Protection Agency (USEPA) Tier 4 Final emission standards to the extent that the equipment is available. In addition, all construction equipment shall be outfitted with Best Available Control Technology (BACT) devices certified by the California Air Resources Board (CARB) or the U.S. Environmental Protection Agency (USEPA). Any emissions-control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations. If Tier 4 Final equipment is not available, the Project Applicant/Developer shall provide the County with documentation showing the reasons for non-availability.
- Alternatively, construction equipment may be selected according to the Green Construction Policy used by the Los Angeles County Metropolitan Transportation Authority or the ports of Los Angeles/Long Beach. These policies include provisions to 'step down' from Tier 4 equipment to Tier 3 or Tier 2 if specified criteria are met. In addition, all construction equipment shall be outfitted with Best Available Control Technology (BACT) devices certified by the California Air Resources Board (CARB) or the U.S. Environmental Protection Agency (USEPA).
- Require the use of 2010 and newer diesel haul trucks (e.g., material delivery trucks and soil import/export). If the Project Applicant/Developer determines that 2010 model year or newer diesel trucks cannot be obtained, trucks that meet USEPA 2007 model year NOx emissions requirements shall be required. If 2010 model year or newer diesel trucks are not available, the Project Applicant/Developer shall provide the County with documentation showing the reasons for non-availability.
- A copy of each unit's certified tier specification, BACT documentation, and CARB or District operating permit shall be provided to the County at the first occurrence of mobilization of each applicable unit of equipment.
- Construction contractors shall ensure construction equipment is properly serviced and maintained to the manufacturer's standards.

- Construction contractors shall limit non-essential idling of construction equipment to no more than five consecutive minutes.
- Construction contractors shall use Super-Compliant Architectural/Industrial (AIM) Coatings to the extent that they are commercially available and certified to meet the applicable requirements of Antelope Valley Air Quality Management District Rule 1113 and South Coast Air Quality Management District Rule 1113.

The following edit was identified subsequent to publication of the Final EIR and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors. No further edits have been made to this text. MM 11-3 on page 5.11-79 of the Draft EIR is hereby revised as follows:

MM 11-3 The Project's plans and specifications shall prohibit wood-burning fireplaces as required by SCAQMD Rule 445 in single-family residences throughout the entire Project site, including at residences that are 3,000 or more feet above mean sea level at which the SCAQMD prohibition would otherwise not apply. Natural gas fireplaces shall be limited to a total of 13,954. These requirements shall be posted on the community intranet and shall be clearly described and distributed to home buyers through their home purchase contracts and CC&Rs.

MM 11-4 on pages 5.11-79 and 5.11-80 is hereby revised as follows:

MM 11-4 The Project's plans and specifications for non-residential buildings shall demonstrate that the following features have been incorporated into the building designs. Proof of compliance shall be provided to the County prior to the issuance of occupancy permits.

- For buildings with over 10 tenant-occupants, changing/shower facilities shall be provided as specified in Section A5.106.4.3, Nonresidential Voluntary Measures, of the CALGreen Code as follows: for 11 to 50 tenant-occupants, one unisex shower and two 2-tier lockers; for 51 to 100 tenant-occupants, one unisex shower and three 2-tier lockers; for 101 to 200 tenant-occupants, one shower per gender and four 2-tier lockers; and for over 200 tenant-occupants, one shower per gender for each 200 additional tenant-occupants and one 2-tier locker for each 50 additional tenant-occupant.

- Preferential parking for low-emitting, fuel-efficient, and carpool/van vehicles shall be provided as specified in Section A5.106.5.1, Nonresidential Voluntary Measures, of the CALGreen Code as follows: two for 10 to ~~15~~ 25 spaces; four for 26 to 50 spaces; six for 51 to 75 spaces; nine for 76 to 100 spaces; eleven for 101 to 150 spaces; 18 for 151 to 200 spaces; and at least 10 percent of total for 201 and more spaces.
- ~~Facilities~~ Electric Vehicle Charging Spaces (EV Space), as defined by CALGreen Code Section 202, shall be installed to support future installation of ~~e~~Electric ~~v~~Vehicle Supply Equipment (EVSE), as defined by CALGreen Code Section 202, ~~charging~~ at each non-residential building with ~~3~~ 10 or more parking spaces. Installation of each EV Space shall be consistent with Sections A5.106.5.3 and A5.106.5.3.1, Nonresidential Voluntary Measures (Tier 1), of the CALGreen Code. The EV Space facilities shall meet Section 406.9 (Electric Vehicle) of the *California Building Code* and as follows:

Total Number of Actual Parking Spaces	**Tier 1 Number of Required EV Spaces**
0-9	0
10-25	2
26-50	3
51-75	5
76-100	7
101-150	10
151-200	14
≥200	8 percent of total spaces rounded up to nearest whole number

~~**Single charging space requirements.** When only a single charging space is required, install a listed raceway capable of accommodating a dedicated branch circuit. The raceway shall not be less than trade size 1. The raceway shall be securely fastened at the main service or subpanel and shall terminate in close proximity to the proposed location of the charging system into a listed cabinet, box or enclosure.~~

Multiple charging spaces required. When multiple EV Spaces are required, plans shall include the location(s) and type of ~~electrical vehicle supply equipment (~~EVSE~~)~~, raceway method(s), wiring schematics and electrical calculations to verify that the electrical system has sufficient capacity to charge simultaneously all the

electric vehicles (EV) at all designated EV ~~charging s~~Spaces at their full rated amperage. Plan design shall be based on Level 2 EVSE at its maximum operating ampacity. Provide raceways from the electrical service panel to the designated parking areas which are required to be installed at the time of construction.

The following further edit was identified subsequent to publication of the Final EIR and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors. No further edits have been made to this text. MM 11-4, which starts on page 5.11-79 of the Draft EIR, is hereby revised as follows:

MM 11-4 The Project's plans and specifications for non-residential buildings shall demonstrate that the following features have been incorporated into the building designs. Proof of compliance shall be provided to the County prior to the issuance of occupancy permits.

- For buildings with over 10 tenant-occupants, changing/shower facilities shall be provided as specified in Section A5.106.4.3, Nonresidential Voluntary Measures, of the CALGreen Code as follows: for 11 to 50 tenant-occupants, one unisex shower and two 2-tier lockers; for 51 to 100 tenant-occupants, one unisex shower and three 2-tier lockers; for 101 to 200 tenant-occupants, one shower per gender and four 2-tier lockers; and for over 200 tenant-occupants, one shower per gender for each 200 additional tenant-occupants and one 2-tier locker for each 50 additional tenant-occupant.
- Preferential parking for <u>electric vehicles, other FVF vehicles,</u> ~~low-emitting, fuel-efficient,~~ and carpool/van vehicles shall be provided as specified in Section A5.106.5.1, Nonresidential Voluntary Measures, of the CALGreen Code as follows: two for 10 to 25 spaces; four for 26 to 50 spaces; six for 51 to 75 spaces; nine for 76 to 100 spaces; eleven for 101 to 150 spaces; 18 for 151 to 200 spaces; and at least 10 percent of total for 201 and more spaces.
- Electric Vehicle Charging Spaces (EV Space), as defined by CALGreen Code Section 202, shall be installed to support future installation of Electric Vehicle Supply Equipment (EVSE), as defined by CALGreen Code Section 202, at each non-residential building with 10 or more parking spaces. Installation of each EV Space shall be consistent with Sections A5.106.5.3 and A5.106.5.3.1,

Nonresidential Voluntary Measures (Tier 1), of the CALGreen Code. The EV Space facilities shall meet Section 406.9 (Electric Vehicle) of the *California Building Code* and as follows:

Total Number of Actual Parking Spaces	Tier 1 Number of Required EV Spaces
0-9	0
10-25	2
26-50	3
51-75	5
76-100	7
101-150	10
151-200	14
>200	8 percent of total spaces rounded up to nearest whole number

Multiple charging spaces required. When multiple EV Spaces are required, plans shall include the location(s) and type of EVSE, raceway method(s), wiring schematics and electrical calculations to verify that the electrical system has sufficient capacity to charge simultaneously all the electric vehicles (EV) at all designated EV Spaces at their full rated amperage. Plan design shall be based on Level 2 EVSE at its maximum operating ampacity. Provide raceways from the electrical service panel to the designated parking areas which are required to be installed at the time of construction.

Increased EVSE Installations. Changes to EVSE parking shall be allowed to the extent allowed under state laws, and the duration of vehicular occupancy of EV spaces may be restricted as authorized by state law to allow charging of multiple vehicles each day. Demand for EV Space facilities shall be monitored biennially by the TMA, additional EV parking spaces shall be made available at lots where demand exceeds supply. The TMA biennial survey shall also consider future transportation technology and practices, including for example changes in vehicular electric charging technology, other FVF changes, or other transportation practices and services changes (e.g., with lower-automobile ownership rates leading to reduced parking demand and/or reduced private ownership of vehicles requiring daily electric charging).

The third bullet under MM 11-5 on page 5.11-80 is hereby revised as follows:

- Bicycle parking shall be provided as specified in Section A4.106.9, Residential Voluntary Measures, of the CALGreen Code or as required by Section 22.52.1225B of the County Code, whichever is more stringent. The requirements under the Residential Voluntary Measures of the CALGreen Code are as follows:

The following further edit was identified subsequent to publication of the Final EIR and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors. No further edits have been made to this text. MM 11-5, which starts on page 5.11-80 of the Draft EIR, is hereby revised as follows:

MM 11-5 The Project's plans and specifications for residential buildings shall demonstrate that the following features have been incorporated.

- Visitor parking shall include preferentially located parking spaces for electric ~~alternative-fueled~~ vehicles.
- Exterior electrical receptacles and natural gas or propane hookups.
- Bicycle parking shall be provided as specified in Section A4.106.9, Residential Voluntary Measures, of the CALGreen Code or as required by Section 22.52.1225B of the County Code, whichever is more stringent. The requirements under the Residential Voluntary Measures of the CALGreen Code are as follows:

  Short-term bicycle parking. Provide permanently anchored bicycle racks within 100 feet of the visitor's entrance, readily visible to passers-by, for five percent of visitor motorized vehicle parking capacity within a minimum of one two-bike capacity rack.

  Long-term bicycle parking for multifamily buildings. Provide on-site bicycle parking for at least one bicycle per every two dwelling units. Acceptable parking facilities shall be conveniently reached from the street and may include, but not limited to:

  1. Covered, lockable enclosures with permanently anchored racks for bicycles.
  2. Lockable bicycle rooms with permanently anchored racks.
  3. Lockable, permanently anchored bicycle lockers.

Long-term bicycle parking for hotel and motel buildings. Provide one on-site bicycle parking space for every 25,000 square feet, but not less than two. Acceptable parking facilities shall be conveniently reached from the street and may include, but not be limited to:

1. Covered, lockable enclosures with permanently anchored racks for bicycles.
2. Lockable bicycle rooms with permanently anchored racks.
3. Lockable, permanently anchored bicycle lockers.

Bicycle parking areas may also be used by small electric vehicles such as scooters.

MM 11-6 on page 5.11-81 is hereby revised as follows:

MM 11-6 The Project's plans and specifications for parking structures and parking lots with 20 or more parking spaces that serve uses other than residential or nonresidential buildings (e.g., trailhead, park), and parking structures and parking lots that serve multifamily residential buildings with 17 or more multifamily units, shall demonstrate that the following features have been incorporated into the parking facility.

- The parking facility shall include a minimum of five percent preferentially located parking spaces for alternative-fueled (electric, natural gas, or similar low-emitting technology) vehicles.
- Five percent of ~~T~~the total number of parking spaces provided in the parking facility, but in no case less than one, shall be Electric Vehicle Parking Spaces (EV Spaces), as defined in CALGreen Code Section 202, capable of supporting future Electric Vehicle Supply Equipment (EVSE), as defined in CALGreen Code Section 202~~include at least one electric vehicle charging station. Electrical lines shall be designed and sized to add additional charging stations when a demand is demonstrated~~. Calculations for the required number of EV Spaces shall be rounded up to the nearest whole number and ~~T~~the design and installation of each EV Space shall be consistent with Section A4.106.8.2, Residential Voluntary Measures, and Section 4.106.4.2, of the CALGreen Code as follows:

Single charging space requirements. When only a single EV ~~charging s~~Space is required, install a listed raceway capable of accommodating a dedicated branch circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall be securely fastened at the main service or subpanel and shall terminate in close proximity to the proposed location of the charging system into a listed cabinet, box or enclosure.

Multiple charging spaces required. When multiple EV ~~charging s~~Spaces are required, plans shall include the location(s) and type of ~~electrical vehicle supply equipment (~~EVSE~~)~~, raceway method(s), wiring schematics and electrical calculations to verify that the electrical system has sufficient capacity to charge simultaneously all the electric vehicles at all designated EV ~~charging s~~Spaces at their full rated amperage. Plan design shall be based on Level 2 EVSE at its maximum operating ampacity. Only underground raceways and related underground equipment are required to be installed at the time of construction.

- For residential parking facilities, bicycle parking shall be provided as specified in Section A4.106.9, Residential Voluntary Measures, of the CALGreen Code, or as required by County Code Section 22.52.1225B, whichever is more stringent.
- Bicycle parking spaces at a rate of 5 percent of minimum required vehicle parking spaces for nonresidential land uses or as required by Section 22.52.1225B of the County Code, whichever is more stringent.

The following further edit was identified subsequent to publication of the Final EIR and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors. No further edits have been made to this text. The first bullet of MM 11-6 on page 5.11-81 of the Draft EIR is hereby revised as follows:

- The parking facility shall include a minimum of five percent preferentially located parking spaces for ~~alternative-fueled (~~electric~~, natural gas, or similar low-emitting technology)~~ vehicles.

The following edit was identified subsequent to publication of the Final EIR and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors. No further

edits have been made to this text. MM 11-10 on page 5.11-82 of the Draft EIR is hereby revised as follows:

MM 11-10 The Project's plans and specifications shall demonstrate that any land uses involving the public congregation of sensitive receptors (e.g. residential, schools, hospital, daycare center) are not within ~~150~~ 250 feet of the near edge of the SR-138 traffic lanes.

MM 11-11 on page 5.11-82 is hereby revised as follows:

MM 11-11 Prior to the approval of any tract map that includes an air quality sensitive receptor (e.g. residential, day care, schools, hospital) located within 500 feet of the SR-138 and/or any "high volume roadway" (i.e., a roadway with an average daily traffic volume that equals or exceeds 50,000 vehicles), the Project Applicant/Developer shall provide to the Air Pollution Control District(s) with jurisdiction over the mapped area a dispersion analysis prepared in accordance with each applicable Air District's methodological requirements to calculate the health risks from vehicle emissions from SR-138 and/or high volume roadway, as relevant. If the study concludes that ~~health risks would be significant at the location of a proposed sensitive receptor~~ any sensitive receptor exposure would equal or exceed 20 in 1 million for cancer risk or 1.0 for non-cancer indices (or future more stringent thresholds as may be adopted by the applicable Air District(s) and approved by the County for use on projects subject to the County's lead agency authority under the California Environmental Quality Act)(District TAC Thresholds), then the applicant shall submit a Toxic Air Contaminant (TAC) Emission Reduction Plan to the applicable Air District(s) for review and concurrence. Following review and concurrence by the applicable Air District(s), a copy of the TAC Emission Reduction Plan, confirming that no sensitive receptors on the Project site will be exposed to TAC risks in excess of District TAC Thresholds, shall be provided to the Los Angeles County Department of Regional Planning, prior to County approval of the tentative tract map. In the TAC Emission Reduction Plan, TAC exposure reduction measures shall be implemented to assure that no sensitive receptors are exposed to TAC-related health impacts that equal or exceed District TAC Thresholds. TAC exposure reduction measures include, but are not limited to, setbacks, vegetative barriers, heating, ventilation and air conditioning (HVAC) system filtration technologies, etc., and shall be required as a condition of approval for the tentative tract map, and/or required as a condition prior to issuance of a

building permit approval for future sensitive use(s) included in the tentative tract map. ~~effective design measures must be implemented into the structures to mitigate for interior air quality, such as ventilation systems that include MERV13 filters or equivalent protections against TACs from vehicle emissions. Confirmation of compliance shall be provided to the County prior to occupancy that include sensitive receptors within 500 feet of the SR-138.~~

The following further edit was identified subsequent to publication of the Final EIR and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors. No further edits have been made to this text. MM 11-11 on page 5.11-82 of the Draft EIR is hereby revised as follows:

MM 11-11 Prior to the approval of any tract map that includes an air quality sensitive receptor (e.g. residential, day care, schools, hospital) located more than 250 feet, but less than or equal to 500 feet, of the SR-138 and/or within 500 feet ~~of the SR-138 and/or~~ of any "high volume roadway" (i.e., a roadway with an average daily traffic volume that equals or exceeds 50,000 vehicles), the Project Applicant/Developer shall provide to the Air Pollution Control District(s) with jurisdiction over the mapped area a dispersion analysis prepared in accordance with each applicable Air District's methodological requirements to calculate the health risks from vehicle emissions from SR-138 and/or high volume roadway, as relevant. If the study concludes that any sensitive receptor exposure would equal or exceed 20 in 1 million for cancer risk or 1.0 for non-cancer indices (or future more stringent thresholds as may be adopted by the applicable Air District(s) and approved by the County for use on projects subject to the County's lead agency authority under the California Environmental Quality Act) (District TAC Thresholds), then the applicant shall submit a Toxic Air Contaminant (TAC) Emission Reduction Plan to the applicable Air District(s) for review and concurrence. Following review and concurrence by the applicable Air District(s), a copy of the TAC Emission Reduction Plan, confirming that no sensitive receptors on the Project site will be exposed to TAC risks in excess of District TAC Thresholds, shall be provided to the Los Angeles County Department of Regional Planning, prior to County approval of the tentative tract map. In the TAC Emission Reduction Plan, TAC exposure reduction measures shall be implemented to assure that no sensitive receptors are exposed to TAC-related health impacts that equal or exceed District TAC Thresholds. TAC exposure reduction measures include, but are not limited to, setbacks, vegetative barriers, heating, ventilation

and air conditioning (HVAC) system filtration technologies, etc., and shall be required as a condition of approval for the tentative tract map, and/or required as a condition prior to issuance of a building permit approval for future sensitive use(s) included in the tentative tract map.

Exhibit Response F.8-196, Sheets A through C, are hereby added to the end of Section 5.11, Air Resources.

Section 5.12 – Noise

The second to last sentence of the first full paragraph on page 5.12-2 is hereby revised as follows:

> MM 12-3 would be incorporated into the Project and require stationary equipment to operate at a distance of greater than 450 feet from residences or schools or to provide an enclosure or similar noise attenuation to limit the average hourly daytime noise level to 60 dBA or less.

MMs 12-1 through 12-3 on pages 5.12-48 and 5.12-49 are hereby revised as follows:

MM 12-1 For residences, hotels and motels, schools, and places of worship ~~adjacent to~~ within 500 feet from the centerline of a collector road with a buildout forecast of 10,000 average daily trips (ADT) or greater, a limited secondary road with a buildout forecast of 6,500 ADT or greater, or any higher classification road, the Project Applicant/Developer shall submit to the County an Acoustical Study prepared in accordance with Section 1207.12 of the County Building Code. The Acoustical Study shall demonstrate that exterior noise levels at areas where residents would reasonably be expected to spend more than one hour (e.g., backyards) would not exceed 65 A-weighted decibels (dBA) Community Noise Equivalent Level (CNEL). The Acoustical Study shall also verify, including during construction and before Certificate of Occupancy (CofO) issuance, that the buildings have been properly designed to comply with a CNEL requirement of 45 dBA for habitable interior living areas, classrooms, and rooms used for patient care and worship. The design features required to achieve the noise standard shall include one or more of the following elements, as verified by the Acoustical Study: building setbacks from the roadway; noise barriers; building orientation relative to the roadway; interior living space (bedroom, common area) orientation; sound-rated windows; upgraded exterior wall and/or roof construction; insulation batts; and forced air ventilation.

150ft Buffer of Future Hwy 138 (approximate pavement edge)

70-year Risk

- < 10
- >= 10

Proposed Land Use

- C - Commercial
- OS - Open Space
- NAP - Not a Part

Aerial Source: ESRI, NAIP 2014

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70-year Risk

Centennial Project

N W E S

500 250 0 500 Feet

Exhibit Response F.8-196 — Sheet A

150ft Buffer of Future Hwy 138
(approximate pavement edge)

70-year Risk

- < 10
- >= 10

Proposed Land Use

- VLDR - Very Low Density Residential
- LDR - Low Density Residential
- MDR - Medium Density Residential
- HDR - High Density Residential
- C - Commercial
- BP - Business Park
- OS - Open Space
- ROW - Right-of-Way

4.3

3.4

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1.2 1.2 1.2 1.2 1.2 1.2 1.2 1.2 1.3 1.3 1.3 1.3 1.3
1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.5 1.5 1.5 1.5 1.5 1.5
1.6 1.6 1.6 1.7 1.7 1.7 1.7 1.7 1.8 1.8 1.8 1.8 1.8
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2.6 2.6 2.7 2.7 2.7 2.7 2.8 2.8 2.9 2.9 3 3 3.1
3.7 3.7 3.8 3.8 3.8 3.9 3.9 4 4.1 4.2 4.4 4.5 4.6
6.2 6.1 6.1 6.2 6.3 6.3 6.5 6.7 7 7.3 7.8 8.8 9.9
12.2 12.1 12.1 12.1 12.2 12.1 11.5 11.4 11.6 11.7 12 13.8 16.1

7.2

Aerial Source: ESRI, NAIP 2014

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70-year Risk

Centennial Project

Exhibit Response F.8-196 — Sheet B

N W E S 500 250 0 500 Feet

150ft Buffer of Future Hwy 138
(approximate pavement edge)

70-year Risk

- < 10
- >= 10

Proposed Land Use

- VLDR - Very Low Density Residential
- LDR - Low Density Residential
- MDR - Medium Density Residential
- HDR - High Density Residential
- I/C - Institutional and Civic
- C - Commercial
- BP - Business Park
- OS - Open Space
- ROW - Right-of-Way

Aerial Source: ESRI, NAIP 2014

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70-year Risk

Centennial Project

N W E S

500 250 0 500

Feet

Exhibit Response F.8-196 — Sheet C

MM 12-2 For each business park use, school, community use area, park and recreation area, animal control facility, utility, County maintenance facility, commercial development, or manufacturing/industrial development, the Project Applicant/Developer shall submit an Acoustical Study verify that the Project has been properly designed to comply with the County of Los Angeles's Noise Ordinance standards at the nearby sensitive properties (both on and off site). The design features required to achieve the noise standard shall include one or more of the following elements, as verified by the Acoustical Study: building setbacks from the sensitive receptors; noise barriers; building orientation relative to the sensitive receptor; sound-rated windows; and upgraded exterior wall and/or roof construction. All stationary and point sources of noise shall adhere to the requirements of the County Code, including but not limited to Section 12.08.390, Exterior Noise Standards, Section 12.08.460, Loading and Unloading Operations, and Section 12.08.530, Residential Air-Conditioning or Refrigeration Equipment.

MM 12-3 To ensure that construction noise is minimized, in addition to meeting all requirements of Section 12.08 of the *County of Los Angeles Code,* the following measures shall be implemented during construction:

- All construction equipment, including internal combustion engines and stationary equipment (used for construction purposes) shall be equipped with noise-reducing features such as, but not limited to improved mufflers, intake silencers, ducts, engine enclosures, and acoustical shields or shrouds. All equipment items must have the manufacturers' recommended noise abatement measures, such as mufflers, engine enclosures, and engine vibration isolators, intact and operational.
- Stationary equipment (e.g., generators, air compressors, concrete pumps) located within 450 feet of residences or schools shall have noise abatement (e.g., engine enclosures or equipment placed behind barriers) to limit the noise level at the sensitive receptor to an average sound level (L_{eq}) of 60 dBA or less. The construction contractor shall place all stationary construction equipment so that emitted noise is directed away from sensitive receptors, to the greatest extent feasible. The construction contractor shall locate pile drivers, or other machinery capable of causing strong vibrations or load noises, such that the rear of the vibratory pile driver or

machinery faces toward the noise sensitive receptor when the machine is being utilized, to the greatest extent feasible.

- Equipment and material staging areas and equipment maintenance areas shall be located at least 500 feet from sensitive noise receivers, if feasible.
- Construction activities should be timed to minimize noise impact on exposed areas, by sequencing the use of equipment with relatively low noise levels versus during noise sensitive periods, routing truck traffic and controlling construction traffic activity to minimize vehicle idling, gear shifting, and accelerating under load, to the greatest extent feasible.
- Impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for project construction should be hydraulically or electrically powered to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust can and should be used. External jackets on the tools themselves can and should be used, if such jackets are commercially available and this could achieve a reduction of 5 dBA. Quieter procedures can and should be used, such as drills rather than impact equipment, whenever such procedures are available and consistent with construction procedures.
- Construction contracts shall specify that notices shall be sent out to all residences located within 1,000 feet of the Project site at least 15 days prior to commencements of construction. The notices shall include the construction schedule and a telephone number where complaints can be registered with the noise disturbance coordinator. A sign, legible at a distance of 50 feet, shall also be posted at the construction sites throughout construction which includes the same details as the notices.
- A "noise disturbance coordinator" shall be established at all construction sites. The disturbance coordinator shall be responsible for responding to any local complaints about construction noise. The disturbance coordinator shall determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and shall be required to implement reasonable measures such that the complaint is resolved.

- The construction contractor shall establish a training program for equipment operators to instruct them in methods of operating their equipment to minimize environmental noise, and to inform them of all applicable State and County noise regulations, including the requirements contained in these mitigation measures.

The third paragraph on page 5.12-46 is hereby revised as follows:

> Increases in the ambient noise environment adjacent to SR-138 between Gorman Post Road and Old Ridge Route Road would exceed the applicable significance criterion at identified receptors. There are no mitigation measures available to reduce the significance of this impact that are within the County's jurisdiction to adopt. There are f~~F~~easible mitigation measures available - construction of a noise barrier at affected receptors or resurfacing the roadway with rubberized asphalt pavement - that would reduce these impacts to a less than significant level, but these measures are not within the jurisdiction of the County. Impacts would be significant and unavoidable.

Section 5.13 – Visual Resources

The fifth sentence of the third paragraph on page 5.13-10 is hereby revised as follows:

> Exhibit 5.14-~~2~~1, ~~Trails and Bikeways in the Project Vicinity~~ Existing Open Space and Recreation Areas, depicts the existing alignment of the PCT.

The following footnote is hereby added to the end of the fourth sentence of the second paragraph on page 5.13-18:

> However, MM 13-1 would require that, during grading and development of the Project, rock outcroppings that are visible from SR-138 would be preserved to the extent feasible.[2]
>
> [2] Section 21061.1 of CEQA defines feasible as "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors".

The following text is hereby added after the fourth sentence of the second full paragraph on page 5.13-21:

> The conceptual realignment of this segment of the PCT has broad views of flat-lying areas developed with rural/agricultural and older suburban land uses. As the PCT comes out of the cover of the hills between Pine Canyon Road and SR-138, trail users will have views of the proposed residential development across SR-138. Closer to SR-138 and at the proposed public trail parking lot just outside the Project site, trail users will see the Business Park adjacent to and west of the PCT on the south side of SR-138 at the intersection of 300th

Street West. The visual simulation in Exhibit 5.13-4 provides an example of the views of the Business Park located south of the SR-138.

The following text is hereby added after the fifth sentence of the second full paragraph on page 5.13-21:

Development on the eastern section of the site would present trail users with views of residential, commercial, and business park structures along 300th Street West for a distance of approximately 1½ miles. A proposed commercial site will be located on the northwest corner of SR-138 and 300th Street West, with the PCT running between the commercial use and 300th Street West. The PCT would proceed north in a setback area along the street that would include a wall between the trail and residential development, a paved bike path and landscaped area. Visible to the east of the future commercial site would be a community park and a school site. A typical cross section of the PCT is provided in Exhibit 5.13-6.

The sixth sentence in the second full paragraph on page 5.13-21 is hereby revised as follows:

MM 13-4 requires that structures proposed along the PCT alignment be screened by a block wall along the rear of the structures and a wide, landscaped setback that would contain the conceptual PCT realignment (see Exhibit 5.13-6 for a typical cross section of the PCT).

The following text is hereby added prior to the third full paragraph on page 5.13-21:

Therefore, views from the conceptual future realignment of the portion of the PCT along 300th Street West would be reduced to a less than significant level.

The PCT and 300th Street West then pass through a privately-owned inholding within Centennial and then enter a second area of residential development, which extends to the east side of 300th Street West. Before the PCT reaches the SWP Aqueduct, on the west side of the PCT is another school and beyond that, a community park. As shown on Exhibit 4-14, the property for the WRF East is adjacent to 300th Street West, just south of the SWP Aqueduct. On the east side of 300th Street West, across from the school, is another small commercial site.

The following edit was identified subsequent to publication of the Final EIR and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors. No further edits have been made to this text. MM 13-4 on page 5.13-30 of the Draft EIR is hereby revised as follows:

MM 13-4 Structures proposed along the Pacific Crest National Scenic Trail (PCT) shall be screened by a block wall or comparable screening along the rear of the structures abutting the trail and a 34-foot-

Source: Placeworks 2017

Typical Cross-Section of Pacific Crest Trail

Exhibit 5.13-6

Centennial Project

(Rev: 8/3/2017 CJS) R:\Projects\CEN\000306\Graphics\EIR\Ex5.13-6_PacificCrestTrail_CrossSection_20170803.pdf

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wide landscaped setback shall be provided that would contain the conceptual PCT realignment.

Section 5.14 – Parks and Recreation

The fourth sentence in the second paragraph under "Existing Alignment" on page 5.14-13 is hereby revised as follows:

Exhibit 5.14-1~~2~~ depicts the existing alignment of the PCT.

The second to last sentence in the first paragraph on page 5.14-22 is hereby revised as follows:

Of this amount, approximately ~~3,867~~ 3,866 acres are designated as Los Angeles County Significant Ecological Area (SEA) 17 to be preserved within the Project site boundaries.

The following edit was identified subsequent to publication of the Final EIR and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors. No further edits have been made to this text. MM 14-5, which starts on page 5.14-28 of the Draft EIR, is hereby revised as follows:

MM 14-5 The Project shall provide public and private recreation amenities that equate to the acreage requirements of the County of Los Angeles General Plan local parkland standard (4 acres for every 1,000 persons in the unincorporated County).* For purposes of monitoring compliance with the General Plan standard, whenever either a Tentative Map or a Final Map is submitted for the County's review and clearance, those maps shall have a table that provides a breakdown of acreage per lot for the following categories: (1) Public Park acreage (maximum slope 3 percent or less); (2) Public Park Acreage Equivalency (which shall be based upon estimated Public Park Improvement Values derived from Total Project Cost Estimates required at the time of map clearance and the Parkland Dedication Ordinance/Quimby Ordinance in effect at the time the map is submitted); (3) Private Park acreage, including pocket parks; (4) Greenway and County multi-use (hiking, equestrian, and mountain biking) trail acreage; (5) Community Recreation Facility acreage; and (6) Private Recreation Facility acreage.

*_Note:_ Independent of this measure, an additional 96 acres of designated park space (increasing identified parkland to 6 acres per 1,000 persons) has been voluntarily agreed to by the Project applicant as a component of the Development Agreement. *See* Item 7.1 (entitled "Commitment to Provide Additional Regional Park Land") in Exhibit G of the Development Agreement.

Section 5.15 – Education

MM 15-2 on page 5.15-21 is hereby revised as follows:

> **MM 15-2** The Project Applicant/Developer shall demonstrate to the County that they have an executed agreement with all school districts that operate within the boundaries of the Project site. The Transportation Management Association shall coordinate with local schools and school districts to establish and maintain a Safe Routes to School program to facilitate students walking and biking to schools.

Section 5.16 – Fire and Law Enforcement Services

The first sentence under "Fire Services" on page 5.16-1 is hereby revised as follows:

> Fire services and emergency response for fire incidents during the initial development phases of the Project would be provided from Fire Station 77, located at 46833 Peace Valley Road in Gorman, which is currently staffed with a three-person assessment engine company, which is an engine company with some limited paramedic capabilities.

The last column of the second row in Table 5.16-1 on page 5.16-7 is hereby revised as follows:

> 3-person assessment engine company**

The last row in Table 5.16-1 on page 5.16-7 is hereby revised as follows:

> ** an engine company with some limited paramedic capabilities

The first sentence on page 5.16-12 is hereby revised as follows:

> Fire services and emergency response for fire incidents during the initial construction phases of the Project would be provided from LACFD Fire Station 77, located at 46833 Peace Valley Road in Gorman, which is currently staffed with a three-person assessment engine company.

The fifth sentence of the fourth paragraph on page 5.16-12 is hereby revised as follows, per the Developer Fee Detailed Fire Station Plan[3419]:

> A large station consists of an approximate ~~15,500~~ 13,000-sf building on an approximately 4.00-acre lot.

[3419] LACFD 2017, Attachment A

Section 5.17 – Other Public Services

The first sentence of the first full paragraph on page 5.17-2 is hereby revised as follows:

> The Project has committed to diverting 100 percent of soil during grading activities, and at least ~~70~~ 75 percent of non-hazardous construction and demolition waste, which exceeds the 65 percent diversion requirement with the Tier I voluntary measure in Section A5.408.3.1 of the California Green Building Standards (CALGreen) Code (PDF 17-2, MM 17-9).

PDF 17-1 on page 5.17-25 is hereby revised as follows:

> **PDF 17-2** The Project has committed to diverting from landfill disposal 100 percent of soil during grading activities, and at least ~~70~~ 75 percent of nonhazardous construction and demolition waste, which exceeds the 65 percent diversion requirement with the Tier I voluntary measure in Section A5.408.3.1 of the California Green Building Standards (CALGreen) Code.

The following edit was identified subsequent to publication of the Final EIR and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors. No further edits have been made to this text. The first paragraph of PDF 17-3 on page 5.17-26 of the Draft EIR is hereby revised as follows:

> **PDF 17-3** The Project includes a Solid Waste Management Plan to achieve the goal of diverting 75 percent of operational solid waste generated from Project requiring landfill disposal. Property Owners shall process on-site, contract with a waste management company and/or recyclers/composters, and/or self-haul to waste and recycling facilities to properly recycle, divert, compost, and dispose of solid wastes generated on-site, such as metals, paper, household plastics, glass, cardboard, food waste, and green waste. Throughout the Project's operation, the waste hauler shall be required by contract to maintain records showing the diversion of not less than 75 percent of the operational waste generated by the Project. The Solid Waste Management Plan has many interrelated components, including, but not limited to:

The third sentence of the first paragraph under "Construction" on page 5.17-29 is hereby revised as follows:

> As described in PDF 17-2 and ensured by MM 17-9, the Project has committed to diverting from landfill disposal 100 percent of soil during grading activities, and at least ~~70~~ 75 percent of nonhazardous construction and demolition waste, which exceeds the 65 percent diversion requirement with the Tier I voluntary measure in Section A5.408.3.1 of the California Green Building Standards (CALGreen) Code.

The third sentence of the first paragraph under "Off-Site Impacts" on page 5.17-32 is hereby revised as follows:

> The planned ~~70~~ 75 percent diversion for non-hazardous construction and demolition waste (PDF 17 2, MM 17-9) would apply to the off-site Project features.

The first sentence of the "Impact Summary" on page 5.17-33 is hereby revised as follows:

> ***Impact Summary:*** As described in PDF 17-2 and ensured by MM 17-9, the Project has committed to diverting 100 percent of soil during grading activities, and at least ~~70~~ 75 percent of nonhazardous construction and demolition waste, which exceeds the 65 percent diversion requirement with the Tier I voluntary measure in Section A5.408.3.1 of the California Green Building Standards (CALGreen) Code.

The following edit was identified subsequent to publication of the Final EIR and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors. No further edits have been made to this text. MM 17-3 on page 5.17-12 of the Draft EIR is hereby revised as follows:

> **MM 17-3** The Project Applicant/Developer shall dedicate to the County Library one (1) site of up to 2.62 acres within Village 3 of the Project (the "Dedicated Land") for public library purposes or other location for the permanent facility mutually agreed upon by the County Librarian and the Project Applicant/Developer. The Project Applicant/Developer shall receive a credit against unpaid Library Facilities Mitigation Fees in an amount equal to the fair market value of all Dedicated Land as of the date of the dedication to the County of Los Angeles for County Library purposes. The Dedicated Land shall be conveyed to the County concurrently with the filing and recordation of the final map within which the Dedicated Land is located. If the County Library desires to increase the size of the Dedicated Land, it shall make such request of the Project Applicant/Developer no later than the date that the County approves the tentative map

for the proposed subdivision in which the Dedicated Land is located. Tthe Project Applicant/Developer agrees to increase the size of the Dedicated Land upon the County's request provided: (i) the County cooperates with the Project Applicant/Developer in any related land use boundary changes, transfers or conversions necessary to accommodate the larger library site, subject to the requirements of CEQA and (ii) the County either pays the fair market value for such land with either (A) U.S. funds or (B) a dollar-for-dollar credit against unpaid Library Facilities Mitigation Fees, so long as the Project-Wide Fee Total has not already been offset pursuant to MM 17-4 through MM 17-7. ~~"Fair market value" for the land described in this paragraph shall be determined based on the value of such land had it been entitled for institutional office purposes and the property had a maximum floor area ratio (FAR) of 0.25.~~ If the Dedicated Land is not used for a County Library ~~at any time changes the use~~ within ten (10) years of the land's conveyance, or if the Dedicated Land ~~from that of~~ is not fully used for a ~~County owned public~~ library ~~facility~~ or another use by the County that is mutually approved by the County and Project Applicant/Developer, then the Dedicated Land (or portion thereof) will revert back to ~~Centennial~~ the Project Applicant/Developer.

The following edit was identified subsequent to publication of the Final EIR and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors. No further edits have been made to this text. MM 17-4, which starts on page 5.17-12 of the Draft EIR, is hereby revised as follows:

MM 17-4 The Project Applicant/Developer shall provide plans and specifications with a one or two-story, turn-key public library building (the "Permanent Facility") on the Dedicated Lands. The Permanent Facility may be constructed in phases. The size and scope of the Permanent Facility will be determined by the County Librarian in consultation with the Project Applicant/Developer provided, however, that the Project Applicant/Developer's maximum financial contribution shall not exceed the Project-Wide Fee Total, less any offsets pursuant to Mitigation Measures 17-4, 17-6, and 17-7 in this EIR. The sizing, design and programming of the Permanent Facility, including the influence of technology on library services, will be agreed upon by representatives from County Library and the Project Applicant/Developer. A report shall be prepared ~~by an independent library consultant selected by~~ in connection with the ~~County Library~~ preparation of the architectural design parameters that will solicit input from the community with

respect to the types of library services desired at the Permanent Library Facility. The consultant's report shall be paid for by the Project Applicant/Developer and the Project Applicant/Developer shall receive a credit against the Project-Wide Fee Total for the Project Applicant/Developer's payment of such costs. The Permanent Facility and Permanent Library furniture, fixture, and equipment (FF&E, as defined below) will be substantially similar in quality and materials to the Quartz Hill branch of the County Library on November 2016. The design of the Permanent Library will be performed by an architect mutually selected by the Project Applicant/Developer and the County Librarian. The Permanent Facility must comply with all requirements of the County Library's Low Voltage Specifications in effect on the date the design contract for the Permanent Facility is fully executed. The County Library shall be responsible for all costs of design and construction of the Permanent Library in excess of the Project Applicant/Developer's Library Facilities Mitigation Fee obligations hereunder. If, after application of the fee credits against Library Facilities Mitigation Fees to which the Project Applicant/Developer is entitled, there is insufficient funds to construct the Permanent Facility and purchase the Permanent Library FF&E, the Project Applicant/Developer shall not be required to fund construction of the Permanent Facility until additional and sufficient funds are authorized by the County to construct the Permanent Facility and to procure the Permanent Library FF&E. The Permanent Facility will be completed and operational on a date agreed to between the County Librarian and the Project Applicant, subject to force majeure and events within the control of the County (such as, for example, the County's failure to pay any funding shortfalls if credits against the Project-Wide Fee Total are exhausted). The size of the Permanent Facility will be proportionately reduced in size and materials if the County approves less than the 19,333 residential units proposed for the Centennial Project.

The first sentence of MM 17-9 on page 5.17-33 is hereby revised as follows:

MM 17-9 The Project Applicant/Developer shall be responsible for implementing the following construction waste reduction requirements to ensure that 100 percent of soil is diverted during grading activities, and that at least ~~70~~ 75 percent of nonhazardous construction and demolition waste is diverted from landfill disposal.

The following edit was identified subsequent to publication of the Final EIR and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors. No further edits have been made to this text. The first paragraph and first bullet of MM 17-10 on page 5.17-34 of the Draft EIR are hereby revised as follows:

MM 17-10 The Project shall incorporate the Solid Waste Management Plan (Section 3.7 of the Centennial Specific Plan) and the Property Owner/Developer shall be responsible for implementation of the following operational waste reduction requirements to ensure that at least 75 percent of operational waste is diverted from landfill disposal, which shall be posted on the community intranet, and shall be clearly described and distributed to home buyers through their home purchase contracts and CC&Rs:

- The Property Owner/Developer shall process an on-site contract with a waste management company and/or recyclers/composters, and/or self-haul to waste and recycling facilities to properly recycle, divert, compost, and dispose of solid waste generated on-site. Throughout the Project's operation, the waste hauler shall be required by contract to maintain records showing the diversion of not less than 75 percent of the operational waste generated by the Project.

Section 5.18 – Water Resources

The following edit was identified subsequent to publication of the Final EIR and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors. No further edits have been made to this text. A third point is added after point 2(b) in MM 18-1 on page 5.18-76 of the Draft EIR as follows:

3. Water meters shall be required to measure potable water use and may be required to measure recycled water usage at commercial, recreational, and institutional uses; and to monitor single family home lots via sample home survey selection criteria.

Section 5.19 – Wastewater Collection

The fourth paragraph on page 5.19-11 is hereby revised as follows:

As discussed in Section 5.19.2, Title 22 of the California Code of Regulations establishes criteria for recycled water, treatment, conveyance, and water quality testing and is administered by the SWRCB Division of Drinking Water. State surface and groundwater quality, including discharge from the WRFs, is further regulated by the Lahontan RWQCB under the Porter Cologne Act. Each of the proposed WRFs will be required to obtain WDRs from the Lahontan RWQCB that include enforceable operational, treatment, conveyance,

discharge, water quality and monitoring requirements before wastewater treatment and recycled water operations may commence. The engineering design and permitting process for the WRF East will include details related to the size, volume, liners, and construction methods for the storage reservoirs, which will be determined at the start of the design process in consultation with the Lahontan RWQCB. Details regarding the type of impervious liner required to prevent infiltration of recycled water and prevent the degradation of the groundwater, including any required monitoring systems to detect leakage in the seasonal storage pond liners, will be provided to the satisfaction of the Lahontan RWQCB, as required through the permitting process. The WDRs issued by the Board will be consistent with the RWQCB's wastewater treatment requirements (Psomas 2017b).

MM 19-2 on page 5.19-14 is hereby revised as follows:

MM 19-2 The Project Applicant/Developer shall demonstrate that the Project has either been annexed into an existing qualified public utility district (e.g. Golden Valley Municipal Water District) or that a new public utility district (e.g. Project Water Purveyor) has been created to serve the Project. The Project Water Purveyor or alternate qualified public utility district shall be responsible for the design, construction, and operation of the wastewater facilities, and shall ensure compliance with all applicable standards and regulations, including all Lahontan RWQCB and Title 22 requirements of the California Code of Regulations.

Wastewater treatment facilities, effluent facilities, and sewer lift stations shall be designed with emergency backup power sources and spill containment features, which shall be provided to the satisfaction of the Lahontan RWQCB.

MMs 19-6 and 19-7 are hereby added after MM 19-5 on page 5.19-15 as follows:

MM 19-6 Recycled water from Project Wastewater Reclamation Facilities that is used in a manner that could accidentally recharge groundwater shall meet the groundwater quality objectives in the Lahontan Basin Plan for nitrate as nitrogen, or 10 milligrams per liter based on the California state drinking water standard as referenced in the Lahontan Basin Plan for groundwater quality objectives of 45 milligrams per liter of nitrate as nitrate.

MM 19-7 The Project Applicant/Developer shall provide an evaluation of alternate disinfection measures, including the use of ultraviolet disinfection, for water treatment at the eastern wastewater reclamation facility (WRF East) and the western wastewater reclamation facility (WRF West), and provide a

recommendation regarding the most efficient and effective means of disinfection to the Lahontan Regional Water Quality Control Board (Lahontan RWQCB) for review. The WRF East and WRF West shall be designed to the satisfaction of the Lahontan RWQCB, with appropriate disinfection measures to ensure that any incidental recharge from the use of recycled water will not adversely affect receiving groundwater.

Section 5.20 – Dry Utilities

The first paragraph under "SCE Infrastructure" on page 5.20-10 is hereby revised as follows:

SCE has also determined that full Project buildout would require a new substation, currently named the "Centennial Substation". The Centennial Substation would be located in the ~~in the~~ vicinity west of 300th ~~to 310th~~ Street West ~~either north or south~~ within Village 6, north of SR-138. This necessary infrastructure would also be ensured via MM 20.2-2. Approximately 4.5 acres would be required for this substation site. The substation would convert the 66 kV voltage to 12 kV~~/9.5 kV~~ for distribution to the various uses within this portion of the Project site. A detailed description of the proposed substation can be found in Section 4.5.10, Dry Utilities, of the Project Description (Section 4.0).

MM 20.2-2 on pages 5.20-13 and 5.20-14 is hereby revised as follows:

MM 20.2-2 The Project Applicant/Developer shall provide the County with plans and specifications that demonstrate a future substation shall be constructed in the eastern half of the Project site to serve Project development in the easterly portion of the Project site. To provide adequate capacity for electrical services for the Project, SCE would select one or both of the following two options to implement: (1) reconfigure the Bailey Substation or (2) upgrade the Gorman Substation and retrofit the existing overhead power lines. An electrical ~~generation and distribution~~ infrastructure system shall be constructed as part of the main utility corridors for dry utilities. The timing of construction, as well as specific facility location and sizing, shall be coordinated with SCE.

Section 5.21 – Climate Change

The following edit was identified subsequent to publication of the Final EIR, and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors. No further edits have been made to this text. PDF 21-4 on page 5.21-41 of the Draft EIR is hereby revised as follows:

PDF 21-4 The Green Development Program requires that all ~~a minimum of 70 percent of~~ public and community pools and spas would be equipped with active solar heating systems where heating is necessary or desired. The applicant for a pool permit shall provide the proposed plan for compliance with this provision prior to obtaining a permit for the pool.

The following edit was identified subsequent to publication of the Final EIR, and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors. No further edits have been made to this text. PDF 21-8 on page 5.21-42 of the Draft EIR is hereby revised as follows:

PDF 21-8 The Green Development Program requires that the Project's wastewater reclamation facilities (WRF) will ~~include equipment to~~ capture and reuse biogas for energy production.

The following edit was identified subsequent to publication of the Final EIR, and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors. No further edits have been made to this text. PDF 21-11 on page 5.21-43 of the Draft EIR is hereby revised as follows:

PDF 21-11 The Centennial Specific Plan's Green Development Program requires the installation of one 208/240 volts of alternating current (VAC) receptacle that may be used for charging electric vehicles in each detached and attached single-family residence in a manner consistent with 2016 CALGreen Code Voluntary Tier 1 Section A4.106.4.1. The installation shall comply with requirements of Section 4.106.4.1 of the 2016 CALGreen Code, or the most applicable code at the time of construction.

The second bullet of PDF 21-12 on pages 5.21-43 and 5.21-67 is hereby revised as follows:

- Multi-family residential buildings of at least seventeen ~~20~~ 17 residential units shall provide a minimum of one alternative energy vehicle fueling station for the first ~~twenty~~ seventeen (~~20~~ 17) residential units and an additional alternative energy vehicle fueling station for each additional ~~twenty~~ seventeen (~~20~~ 17) residential units thereafter.

The following further edit was identified subsequent to publication of the Final EIR, and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors.

No further edits have been made to this text. The first paragraph of PDF 21-12 on page 5.21-43 of the Draft EIR is hereby revised as follows:

PDF 21-12 The *Centennial Specific Plan's* Green Development Program requires each applicant to provide plans and specifications to the County demonstrating compliance with the Electric Vehicle Supply (EVS) charging station measures specified in MM 11-4. If and to the extent subsequently approved by the County, compliant with state laws, and resulting in no new significant impacts to the environment following County review and approval, EVS charging stations may be replaced by "alternative energy fueling stations" which may include other types of electric vehicle charging technology (e.g., operating at higher or lower voltages), or alternative vehicular fuel technology that results in zero or near zero (as defined by CARB) GHG emission such as hydrogen fuel cells, biofuels, or other qualifying fuel technologies. An electric charging station shall allow for simultaneous charging of two electric vehicles. ~~for an applicable construction permit to install "alternative energy fueling stations" as listed below. An "alternative energy vehicle fueling station" is a 208/240 VAC electrical vehicle charging station (allowing simultaneous charging of two or more vehicles) or a station providing another new or improved technology (e.g. compressed natural gas [CNG] and hydrogen fuel cell) that provides refueling for vehicles that do not use fossil fuel.~~

The following edit was identified subsequent to publication of the Final EIR, and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors. No further edits have been made to this text. The first bullet of PDF 21-14 on page 5.21-44 of the Draft EIR is hereby revised as follows:

- Visitor parking shall include preferentially located parking spaces for ~~alternative-fueled~~ electric vehicles.

A third bullet is hereby added under PDF 21-15 on page 5.21-44 as follows:

- For residential parking facilities, bicycle parking shall be provided as specified in Section A4.106.9, Residential Voluntary Measures, of the CALGreen code or as required by Section 22.52.1225B of the County Code, whichever is more stringent.

The following further edit was identified subsequent to publication of the Final EIR, and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors. No further edits have been made to this text. PDF 21-15 on page 5.21-44 of the Draft EIR is hereby revised as follows:

PDF 21-15 The Green Development Program requires that prior to issuance of an applicable construction permit for each parking structure and parking lots with 20 or more parking spaces that serve uses other than residential or nonresidential buildings (e.g., trailhead, park), and parking structures and parking lots that serve multifamily residential buildings with 17 or more multifamily units, the Project Applicant/Developer shall provide plans and specifications to the County demonstrating that the following features have been incorporated into the parking facility:

- The parking facility shall include a minimum of five percent preferentially located parking spaces for ~~alternative-fueled (~~electric, ~~natural gas, or similar low-emitting technology)~~ vehicles.
- Five percent of ~~T~~the total number of parking spaces provided in the parking facility, but in no case less than one, shall be Electric Vehicle Parking Spaces (EV Spaces), as defined in CALGreen Code Section 202, capable of supporting future Electric Vehicle Supply Equipment (EVSE), as defined in CALGreen Code Section 202 ~~include at least one electric vehicle charging station. Electrical lines shall be designed and sized to add additional charging stations for up to three percent of the total parking spaces when a demand is demonstrated~~. Calculations for the required number of EV Spaces shall be rounded up to the nearest whole number and ~~T~~the design and installation of each EV space shall be consistent with Section A4.106.8.2, Residential Voluntary Measures, and Section 4.106.4.2, of the CALGreen Code.
- For residential parking facilities, bicycle parking shall be provided as specified in Section A4.106.9, Residential Voluntary Measures, of the CALGreen code or as required by Section 22.52.1225B of the County Code, whichever is more stringent.

The first sentence of the PDF 17-2 discussion under "Project Design Features" on page 5.21-53 is hereby revised as follows:

PDF 17-2 PDF 17-2 of Section 5.17, Other Services, states that the Project has committed to diverting from landfill disposal 100 percent of soil during grading activities, and at least ~~70~~ 75 percent of nonhazardous construction and demolition waste, which exceeds the 65 percent diversion requirement with the Tier I voluntary measure in Section A5.408.3.1 of the California Green Building Standards Code.

Table 5.21-11 on pages 5.21-73 through 5.21-84 is hereby revised as follows:

TABLE 5.21-11
CENTENNIAL PROJECT COMPLIANCE WITH THE LOS ANGELES COUNTY COMMUNITY CLIMATE ACTION PLAN

Existing Initiatives and New CCAP Actions	Centennial Implementation Actions
CATEGORY 1: GREEN BUILDING AND ENERGY	
Existing County Initiatives	
Energy Upgrades to Existing Structures provides rebates and incentives for energy retrofit efficiency projects.	Because Centennial will be a new community, energy efficiency is required for buildings, infrastructure (e.g., outdoor irrigation), and appliances. The Project does not include any existing structures, and thus this CCAP action is not applicable.
Los Angeles County Code (Title 31) requires implementation of sustainable policies for new building design.	The Project is consistent with Title 31 of the County Code ~~applies to the Project,~~ and ~~is~~ implement~~ed through~~ a variety of measures including, for example (1) landscape design restrictions related to minimizing turf grass and the use of non-invasive and drought tolerant plants and tree species; (2) recycling and/or salvaging a minimum of 75% of the non-hazardous construction and demolition debris, and 100% of soils during grading; and (3) compliance with a water budget for landscape irrigation use conforms to the California Department of Water Resources Model Water Efficient Landscape Ordinance.
Commercial Building Performance Partnership provides financial mechanisms for energy conservation upgrades to existing buildings.	Energy conservation is required for new structures, and no retrofits of existing structures are included in the Project and thus this CCAP action is not applicable.
Renewable Energy and Clean Fuels Program implements projects to accelerate the use of compressed natural gas as an alternative fuel.	Renewable energy produced within the Project will be primarily rooftop solar, and at minimum 50% of the Project's anticipated electricity demand will be satisfied from on-site renewable energy generation. It is anticipated that the dominant alternative transportation fuel will be electricity (e.g., electric and hybrid-electric vehicles); however, compressed natural gas (CNG) will also be made available as a transportation fuel to the extent consistent with

TABLE 5.21-11
CENTENNIAL PROJECT COMPLIANCE WITH THE LOS ANGELES COUNTY COMMUNITY CLIMATE ACTION PLAN

Existing Initiatives and New CCAP Actions	Centennial Implementation Actions
	then-applicable recommendations and/or requirements from the California Air Resources Board (CARB) and County.
New CCAP Actions	
BE-1: Green Building Development encourages energy reductions in new development through voluntary reductions that exceed the minimum standards set forth in the State's CALGreen Building Code (Title 24).	The Project exceeds the CALGreen Building Code minimum requirements in several ways, including: 1. Compliance with CALGreen voluntary measure A4.203.1.2.1 for low-rise residential buildings, resulting in buildings that would exceed 2016 Title 24 requirements by 15% (PDF 21-1). 2. Compliance with CALGreen voluntary measure A5.203.1.2.1 for nonresidential buildings and residential buildings taller than 4 stories, resulting in buildings that would exceed 2016 Title 24 requirements by 10%. 3. Owners of all single-family units and multi-family residential structures are required, upon resale, to present to the buyer a written energy audit checklist at the time the seller provides the buyer with the Real Estate Transfer Disclosure Statement required by Section 1102 et seq. of the *California Civil Code.* The energy audit checklist shall certify that all heating, ventilation, and air conditioning (HVAC) systems, thermostats, appliances, windows, and swimming pools are either the same as originally installed or otherwise comply with the Green Development Program. 4. For nonresidential buildings, within 90 days after the end of the first full calendar year following the issuance of the certificate of occupancy, and within 90 days after each 5-year period thereafter, the owner or tenant in possession thereof shall submit to the master commercial owners association or other applicable association a report prepared by the owner or a qualified, independent third party that evaluates whether all major building systems such as a heat furnace, air conditioner, and other energy-consuming mechanical fixtures are working within the design standards established by the manufacturer of such equipment. 5. Residential appliances offered by builders shall consist ~~exclusively~~ of low-energy and/or low-

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CENTENNIAL PROJECT COMPLIANCE WITH THE LOS ANGELES COUNTY COMMUNITY CLIMATE ACTION PLAN

Existing Initiatives and New CCAP Actions	Centennial Implementation Actions
	water consuming appliances that are Energy-Star compliant for each appliance that is rated by Energy Star (e.g., refrigerator, clothes washer, dishwasher, and room air conditioner). These project design features meet and exceed the requirements of ~~Section 22.52.2130~~ Title 31 of the County Code (Green Building).
BE-2: Energy Efficiency retrofits will be further encouraged for existing buildings and structures.	The Project does not include any existing buildings, so this measure is not applicable.
BE-3: Solar Installations are encouraged for new and existing buildings	Renewable energy produced within the Project would ~~be generated~~ provide ~~at~~ a minimum of 50% of the Project's anticipated electricity demand ~~would be satisfied from on-site renewable energy generation~~. Specific metrics to achieve this goal include: 1. A minimum of 100% of all single-family detached residential units at buildout shall ~~have~~ be pre-wired to support solar energy collection equipment and a minimum of 30% of all single-family detached residential units at buildout shall have solar energy collection equipment installed on roof areas or on top of other structures on the site (e.g., patio covers or pergolas). 2. Single-family detached residential units with roof areas that are within 30 degrees of true south shall include plumbing appropriate for a solar water heating running from the installed water heater to the solar-ready roof areas, and those with roof areas that are not within 30 degrees of true south shall be plumbed to accommodate an on-demand tankless water heater. 3. A minimum of 10% of all single-family detached residential units at buildout shall either include an installed solar water heater, tankless water heater, or other energy efficient water heater technology approved by the County. 4. A minimum of 30% of all multi-family residential units at buildout shall have solar energy collection equipment, which shall be installed on roof areas facing within 30 degrees of true south. 5. A~~ll~~ minimum of 70% of public and community swimming ~~s~~pools constructed within the Project shall be heated by a solar water heating system or

TABLE 5.21-11
CENTENNIAL PROJECT COMPLIANCE WITH THE LOS ANGELES COUNTY COMMUNITY CLIMATE ACTION PLAN

Existing Initiatives and New CCAP Actions	Centennial Implementation Actions
	renewable power system that provides electricity for water heating. 6. A minimum of 60% of buildings located within Business Park land use designations at buildout shall have solar panel systems installed on roof and parking areas. Such systems shall be installed on roof areas facing within 30 degrees of true south.
BE-4: Alternative Renewable Energy Programs are designed to encourage the use of non-solar renewable energy technology such as wind, hydropower, and geothermal resources, as feasible.	The Project site does not have hydropower or geothermal resources. Utility-scale wind plants present a potential hazard to sensitive biological resources such as the California Condor, and utility-scale solar plants are not an authorized use on the Project site or vicinity under the Antelope Valley Area Plan. However, the Specific Plan states that renewable energy systems shall be installed in connection with the development of one or more of the following: residential units, non-residential buildings, public buildings, or Specific Plan utility facilities located either within the Specific Plan area or within its immediate vicinity.
BE-5: Wastewater Treatment Plant Biogas recovery and reuse	The Project's wastewater reclamation facilities (WRF) will include equipment to capture and reuse biogas for energy production.
BE-6: Energy Efficiency Retrofits of Wastewater Equipment promotes efficient treatment equipment	There is no existing wastewater treatment facility at the Project site, so this measure is not applicable.
BE-7 Landfill Biogas encourages renewable biogas projects at regional landfills.	There is no existing or proposed landfill at the Project site, so this measure is not applicable.
CATEGORY 2: LAND USE AND TRANSPORTATION	
Existing County Initiatives	
Healthy Design Ordinance (Ordinance 2013-001, amending Title 21 (Subdivisions) and Title 22 (Planning and Zoning)) is designed to require projects to have better walking environments (e.g., with wider sidewalks and more shade trees), encourage more bicycling (e.g., by requiring bike parking), improve access to healthy foods (e.g., with weekly farmer's markets and permissible community gardens), and enhance project review requirements to provide an opportunity to review healthy design features such as landscaping, lighting, street furniture and bike parking spots.	The Project design ~~complies~~ is consistent with all of the substantive standards of the Healthy Design Ordinance, including but not limited to requirements for right-of-way widths; pedestrian crossings; tree plantings in lot frontages; and bicycle parking facilities. The Project allows community gardens as legally permitted uses in residential, ~~and~~ mixed-use, park, recreation/entertainment, and institutional/civic areas of the Project. The Project Transportation Demand Management (TDM) Program includes bicycle program metrics, discussed below.

TABLE 5.21-11
CENTENNIAL PROJECT COMPLIANCE WITH THE LOS ANGELES COUNTY COMMUNITY CLIMATE ACTION PLAN

Existing Initiatives and New CCAP Actions	Centennial Implementation Actions
Bicycle Master Plan promotes bicycle ridership and bike-friendly designs throughout the County.	The Project includes a safe and aesthetically pleasing dedicated bicycle network and pedestrian system into all development designs, and distributes community uses such as neighborhood parks, elementary schools, and neighborhood-scale retail in key locations throughout the Project to reduce single-occupancy automobile travel for these neighborhood-scale destinations. The Mobility Plan of the Specific Plan ~~Project TDM Program~~ includes bicycle program metrics, discussed below.
Sustainable Transportation Programs to increase the efficiency of the transportation network.	The Project includes the following measures to reduce single-occupancy commuter travel to and from the Project site: 1. Land use planning principles that create a balanced master-planned community that includes: A. Mixed-use neighborhoods where residential, commercial, and other employment-generating uses and institutional/public uses are proximate to each other and connected by a network of walkable streets, bikeways and trails to reduce reliance on automobile use within the Project site. B. A diverse range of residential product types, including dedication of a minimum of 10 percent of residential units as affordable housing, to compliment the diverse range of employment opportunities within the Project and help minimize the off-site employment commuter trips. 2. Establishment of a Transportation Management Association (TMA) that develops strategic linkages with other Antelope Valley/Santa Clarita Valley TMAs or like organizations in order to maximize transit efficiencies and services. The TMA's purpose is also to coordinate and facilitate transit and rideshare usage to serve as many riders as possible, and to reduce the volume of automobile trips within and from the Project site, as described in more detail in the ~~Project TDM Program~~ Mobility Plan below.

TABLE 5.21-11
CENTENNIAL PROJECT COMPLIANCE WITH THE LOS ANGELES COUNTY COMMUNITY CLIMATE ACTION PLAN

Existing Initiatives and New CCAP Actions	Centennial Implementation Actions
New CCAP Actions	
LUT-1: Bicycle Programs and Supporting Facility improvements to expand the County's existing bicycle network.	As a new community, the Project includes a network of bikeways and multi-purpose trails, as well as community trails, in addition to the greenways and paseos. The Project trail system will connect to the Pacific Crest Trail (PCT), which is designated as a National Scenic Trail that traverses approximately 2,650 miles through 3 states (California, Oregon, and Washington) will be relocated to the west side of 300th Street West, which travels through the Project site. This realignment is not a part of the Project, but is assumed to be the future alignment for evaluation purposes in this EIR. The Project requires bicycle parking facilities for 5% of the minimum required vehicle parking spaces for nonresidential land uses or as required by County Code Section 22.52.1225B, whichever is more stringent, to encourage and support bicycle use.
LUT-2: Pedestrian Network improvements to expand the County's existing pedestrian network.	As a new community, the Project implements a Complete Streets design approach that includes sidewalks and dedicated bicycle network and pedestrian system incorporated into all development designs and throughout the community to reduce single-occupancy automobile travel for neighborhood-scale destinations.
LUT-3: Transit Expansion to create priority bus lanes and improve the existing efficiency of the transportation network.	As a new community, the Project implements a ~~TDM Program~~ Mobility Plan that includes strategic linkages with other Antelope Valley/Santa Clarita Valley TMAs or like organizations in order to maximize transit efficiencies and services. The TMA's purpose is to coordinate and facilitate transit and rideshare usage to serve as many riders as possible. The Project also includes a transit easement running North-South through the center of the development, connecting its most housing-dense areas with the business park, accommodating future internal commuting within the Project site.
LUT-4: Travel Demand Management to encourage ride-sharing and employer-sponsored vanpools to reduce peak-period vehicle trips.	The Project ~~TDM Program~~ Mobility Plan encourages ride-sharing and employer-sponsored vanpools, as well as other measures to reduce automobile trips within and from the Project site. The TDM will be managed by the TMA.

TABLE 5.21-11
CENTENNIAL PROJECT COMPLIANCE WITH THE LOS ANGELES COUNTY COMMUNITY CLIMATE ACTION PLAN

Existing Initiatives and New CCAP Actions	Centennial Implementation Actions
LUT-5: Car-Sharing Program promotes the shared use of private and employer-owned vehicles.	The Project ~~TDM Program~~ Mobility Plan includes formation of strategic partnerships with car sharing services (e.g., Uber or Lyft) and other innovation/technology approaches to increase transportation efficiency, as described in more detail below.
LUT-6: Land Use Design and Density targets land use patterns to support mobility, and improve the diversity of urban and suburban developments	The Project includes a balanced mix of housing, employment, and community uses including schools, retail, and public services, to minimize off-site trips. The Project design also encourages pedestrian and bicycle use through the use of walkable communities planning and design techniques, and includes a diverse range of housing types.
LUT-7: Transportation Signal Synchronization Program Improve the network of traffic signals on the major streets throughout Los Angeles (LA) County.	The Project site does not include any existing traffic signals, but the Project will use synchronized traffic signals to ensure the efficient use of future Project roadways.
LUT-8: Electric Vehicle Infrastructure. Install EV charging facilities at County-owned public venues and ensure that at least one-third of these charging stations will be available for visitor use.	The Project requires electric vehicle infrastructure, specifically: 1. Builders will be required to install one 240 volt of alternating current (VAC) outlet available for use to charge electric vehicles in the garage or other suitable location for each single-family home. 2. For business park and institutional land uses, a minimum of 1 electric vehicle charging station (consisting of a 208/240 VAC or alternative electric charging technology approved by the County, serving 2 adjacent parking spaces) will be installed for the first 50,000 square feet (sf) of building space, and an additional fueling station will be installed for each subsequent 50,000 sf of building space. 3. For multi-family residential projects that include at least ~~20~~ 17 units, a minimum of 1 alternative energy ~~electric~~ vehicle fueling ~~charging~~ station be installed for the first 17 ~~20~~ units and an additional ~~charging~~ alternative energy vehicle fueling station will be installed for each subsequent ~~20~~ 17 units. 4. Preferential parking for low-emitting, fuel-efficient, and carpool/van vehicles shall be provided for nonresidential structures ~~larger than 20,000 sf and made available for employees and visitors~~ as specified in Section

TABLE 5.21-11
CENTENNIAL PROJECT COMPLIANCE WITH THE LOS ANGELES COUNTY COMMUNITY CLIMATE ACTION PLAN

Existing Initiatives and New CCAP Actions	Centennial Implementation Actions
	A5.106.5.1, Nonresidential Voluntary Measures, of the CALGreen Code as follows: two for 10 to 25 spaces; four for 26 to 50 spaces; six for 51 to 75 spaces; nine for 76 to 100 spaces; eleven for 101 to 150 spaces; 18 for 151 to 200 spaces; and at least 10% of total for 201 and more spaces. 5. For parking facilities and parking lots with more than 20 spaces, the parking facility or lot must include: A. A minimum of 5% preferentially located parking spaces for alternative-fueled vehicles. B. Electrical lines designed and sized to provide electric vehicle charging stations for up to 3% of parking space when demand is demonstrated.
LUT-9: Idling Reduction Goal. Encourage idling limits of 3 minutes for heavy-duty construction equipment as feasible within manufacturer's specifications.	The Project includes as a mandatory contract specification for all construction contractors a restriction to limit unnecessary construction equipment idling to 3 minutes, and include methods to encourage equipment operators to achieve the 3-minute goal.
LUT-10: Efficient Goods Movement is designed to improve cargo transport on existing roadways and transportation infrastructure.	The Project includes contributions to California Department of Transportation (Caltrans) to avoid any adverse Project-related impact to goods movement on Interstate (I) 5 and State Route (SR) 138. Contributions are described in mitigation measures in Section 5.10, Traffic, Access and Circulation.
LUT-11: Sustainable Pavements Program is designed to improve the resiliency of, and reduce the GHG emissions associated with, existing paved roadways.	The Project will use durable roadway paving materials that will be determined upon consideration of aggregates, asphalt materials, cementitious materials, recycled materials, and other roadway materials that are commonly used in pavement construction in order to assess from a life-cycle perspective the role they play in contributing to the sustainability of the Project's pavement system. "Cool" pavements will be used to reduce heat island effects.
LUT-12: Electrify Construction and Landscaping Equipment. Utilize electric equipment wherever feasible for construction projects. Reduce the use of gas-powered landscaping equipment.	All landscape maintenance equipment at Centennial will be CARB-approved or electric. The Project will incorporate an outreach and education program for the Centennial property owners, in collaboration of SCAQMD, to reduce the use of gasoline-or diesel-powered landscaping equipment.

TABLE 5.21-11
CENTENNIAL PROJECT COMPLIANCE WITH THE LOS ANGELES COUNTY COMMUNITY CLIMATE ACTION PLAN

Existing Initiatives and New CCAP Actions	Centennial Implementation Actions
CATEGORY 3: WATER CONSERVATION AND WASTEWATER	
Existing County Initiatives	
Conservation rebates, smart gardening workshops and stormwater controls provide water and wastewater improvements in existing communities	This measure does not apply to new communities. The Project includes compliance with drought-response State measures including the Model Water Efficient Landscape Ordinance (MWELO), which are more stringent than required by CALGreen (DWR 2015). The Project includes 2 WRFs that will provide a reliable supply of recycled water for landscaping, to reduce reliance on potable water supplies.
New CCAP Actions	
WAW-1: Per Capita Water Use Reduction Goal. Meet the State established per capita water use reduction goal as identified by Senate Bill (SB) X7-7 for 2020. The State goal is a 20 percent reduction in per capita water use compared to baseline levels.	The final EIR for the Antelope Valley Area Plan (AVAP) update utilized the Antelope Valley Integrated Regional Water Management Plan (AVIRWMP) average Antelope Valley estimate of per capita water use (199 gallons per capita per day [gpcd]) to evaluate the water demand growth that could occur from the implementation of the AVAP. At full buildout, the Project's total per capita water use would be approximately 177.5 gpcd. The Project would reduce water demand by approximately 10% below the per capita average consumption in the Antelope Valley. The analysis compared the Project to the baseline per capita consumption in the Project vicinity since the Project site is undeveloped there is not an established baseline of water consumption on the Project site.
WAW-2: Recycled Water, Water Supply Improvement Programs, and Stormwater Runoff. Promote the use of wastewater and gray water to be used for agricultural, industrial, and irrigation purposes. Manage stormwater, reduce potential treatment, and protect local groundwater supplies.	The Project includes a comprehensive water resources management program, including: 1. *Recycled Water.* The Project includes water recycling facility to recycle, and reuse, wastewater piped to the Project WRF. All nonresidential and multi-family development must install recycled water infrastructure to irrigate common areas for these facilities (except where prohibited by law), and all available recycled water shall be used for such irrigation uses. 2. *Potable Water Conservation.* The Project includes numerous potable water conservation measures, including: A. Establishing maximum available water allocations for each residential and commercial parcel, and monitoring and enforcing such allocations through a

TABLE 5.21-11
CENTENNIAL PROJECT COMPLIANCE WITH THE LOS ANGELES COUNTY COMMUNITY CLIMATE ACTION PLAN

Existing Initiatives and New CCAP Actions	Centennial Implementation Actions
	metering system and rate structure and/or penalty structure for those exceeding their water allocations. B. Restricting outdoor landscaping planting in private yards to a designated low-water plant pallets to minimize use of potable water for private landscaping, ~~prohibiting~~ mandating that only recycled water be used to irrigate turf in commercial areas ~~projects~~, and restricting turf to 25% of landscaped areas on private residential projects. C. Requiring the ~~exclusive~~ use of Energy Star or equivalent major appliances, as described above, that use less water (as well as less energy). D. Requiring the exclusive use of kitchen and bathroom faucets that comply with 2013 CALGreen code residential voluntary measures specified in Sections A4.303.1 and A4.303.3 of the Code. 3. *Storm Water Management.* The Project's integrated water resources management approach will comply with County requirements related to hydrology and flood control considerations through compliance with Low Impact Development (LID) standards and best management practices (BMPs) for sediment management through hydromodification techniques. The Project includes 2 WRFs that will provide a reliable supply of recycled water for landscaping, to reduce reliance on potable water supplies. The Project provides a reliable water supply through use of an integrated water resources management approach that incorporates water conservation measures; uses recycled water for non-potable uses; uses multiple sources of water supply to ensure that the Project's water needs are met without the need to solely rely on the annual delivery of a fixed amount of imported water; provides a high degree of water supply reliability for each stage of Project buildout; and minimizes the impacts of additional water demand on the state's water supply.

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CENTENNIAL PROJECT COMPLIANCE WITH THE LOS ANGELES COUNTY COMMUNITY CLIMATE ACTION PLAN

Existing Initiatives and New CCAP Actions	Centennial Implementation Actions
CATEGORY 4: WASTE REDUCTION, REUSE AND RECYCLING	
Existing Initiatives	
Community waste diversion programs to redirect 50 percent of solid wastes to recycling or re-use instead of landfills	The Project will exceed this existing measure by implementing a 100 percent diversion of soil during grading activities, and at least ~~70~~ 75 percent of non-hazardous construction and demolition waste. The Project will also divert 75 percent of operational solid waste.
New CCAP Action	
SW-1: Waste Diversion Goal. For the County's unincorporated areas, adopt a waste diversion goal to comply with all State mandates to divert at least 75 percent of waste from landfill disposal by 2020.	The Project includes both a construction and operational waste reduction measures. 1. The Project must implement a plan and monitoring program to ensure recycle or reuse of a minimum of 75% by weight of construction and demolition debris, exclusive of soil, rock, and gravel. This quantity exceeds the 50% requirement of Section 20.87.040 of the County Code and the 75% target proposed in the CCAP. 2. The Developer must provide the County with a contract establishing an on-site waste recycling and composting program, including the collection of metals, paper, household plastics, glass, cardboard, green waste and food waste. The waste hauler should be required by contract to maintain records showing the diversion of not less than 75% of the operational waste generated by the Project. The Project will include a minimum of five acres for a Materials Recovery Facility/Transfer Station (MRF/TS), which may include mulching and composting operations and a Household Hazardous Waste Permanent Collection Center. An MRF/TS could be privately or publicly operated. The MRF/TS would allow for all materials that are recyclable to be sorted and compacted for shipment to an off-site recycling processing facility. The Developer shall encourage a waste management company to build these facilities within the Project site by grading, improving, and providing utility hookups by the end of the first phase of construction. The CC&R for the MRF/TS will require that the lot provided within the site remain as a Non-Disposal Solid Waste Processing Facility.

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Existing Initiatives and New CCAP Actions	Centennial Implementation Actions
CATEGORY 5: LAND CONSERVATION AND TREE PLANTING	
Existing Initiatives	
Implementation of the urban forestry plan and oak woodlands conservation management plan.	The Project's Natural Resources/Open Space Management Plan includes both on-site and off-site preserve areas. Approximately 5,116 acres of open space are available for use as on-site mitigation and off-site mitigation areas total 23,547 acres, for a combined total of 28,663 acres of preserved open space resulting from Project implementation. The Project avoids development within established Significant Ecological Areas, minimizes disturbance of high-value biological resources, including native grasslands, oak savannas, and oak woodlands, and preserve contiguous open space areas in order to keep its viability as wildlife habitat. Open spaces will be provided within the Business Park that allow for wildlife movement between the southern portion of the Project site through to the drainage located on the northern side of SR 138.
New CCAP Actions	
LC-1: Develop Urban Forests. Support and expand urban forest programs within the unincorporated areas.	The Project's Natural Resources/Open Space Management Plan includes both on-site and off-site preserve areas. Approximately 5,116 acres of open space are available for use as on-site mitigation and off-site mitigation areas total ~~23,547~~ 39,213 acres, for a combined total of ~~28,663~~ 44,329 acres of preserved open space resulting from Project implementation. The Project avoids development within established Significant Ecological Areas, minimize disturbance of high-value biological resources, including native grasslands, oak savannas, and oak woodlands, and preserve contiguous open space areas in order to keep its viability as wildlife habitat. The planting of an estimated 35,123 new trees, as required by the County Tree Planting Ordinance would result in an estimated long-term sequestration of 24,867 metric tons of carbon dioxide equivalent ($MTCO_2e$). This is a conservative analysis, as it is likely that many more trees would be planted than the minimum required by the County ordinance.

TABLE 5.21-11
CENTENNIAL PROJECT COMPLIANCE WITH THE LOS ANGELES COUNTY COMMUNITY CLIMATE ACTION PLAN

Existing Initiatives and New CCAP Actions	Centennial Implementation Actions
LC-2: Create New Vegetated Open Space. Restore and revegetate previously disturbed land and/or unused urban and suburban areas.	This action is not directly applicable to new development projects. However, the Project's Natural Resources/Open Space Management Plan includes both on-site and off-site preserve areas. Approximately 5,116 acres of open space are available for use as on-site mitigation and off-site mitigation areas total ~~23,547~~ 39,213 acres, for a combined total of ~~28,663~~ 44,329 acres of preserved open space resulting from Project implementation. The Project avoids development within established Significant Ecological Areas, minimize disturbance of high-value biological resources, including native grasslands, oak savannas, and oak woodlands, and preserve contiguous open space areas in order to keep its viability as wildlife habitat. Additionally, the Project would plant an estimated 35,123 new trees, as required by the County Tree Planting Ordinance. This would result in an estimated long-term sequestration of 24,867 $MTCO_2e$. This is a conservative analysis, as it is likely that many more trees would be planted than the minimum required by the County ordinance
LC-3: Promote the Sale of Locally Grown Foods and/or Products. Establish local farmers markets and support locally grown food.	The Project will include a weekly Farmer's Market sponsored by the homeowners association (HOA) or other entity selected by the Master Applicant/Developer, and will allow for community gardens as a permitted use in ~~commercial and~~ residential, mixed use, park, recreation/entertainment, and institutional/civic areas. The Project also accommodates a total of 50-acres for on-site food-growing and agriculture-related uses in places such as community gardens, orchards, groves, and greenhouses.
LC-4: Protect Conservation Areas. Encourage the protection of existing land conservation areas.	The Project's Natural Resources/Open Space Management Plan includes both on-site and off-site preserve areas. Approximately 5,116 acres of open space are available for use as on-site mitigation and off-site mitigation areas total ~~23,547~~ 39,213 acres, for a combined total of ~~28,663~~ 44,329 acres of preserved open space resulting from Project implementation. The Project avoids development within established Significant Ecological Areas, minimize disturbance of high-value biological resources, including native grasslands, oak savannas, and oak woodlands, and preserve contiguous open space areas in order to keep its viability as wildlife habitat.

The following further edit was identified subsequent to publication of the Final EIR and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors. No further edits have been made to this text. The following row of Table 5.21-11 of the Draft EIR is hereby revised as follows:

BE-3: Solar Installations are encouraged for new and existing buildings	Renewable energy produced within the Project would provide a minimum of 50% of the Project's anticipated electricity demand. Specific metrics to achieve this goal include: 1. A minimum of 100% of all single-family detached residential units at buildout shall be pre-wired to support solar energy collection equipment and a minimum of 30% of all single-family detached residential units at buildout shall have solar energy collection equipment installed on roof areas or on top of other structures on the site (e.g., patio covers or pergolas). 2. Single-family detached residential units with roof areas that are within 30 degrees of true south shall include plumbing appropriate for a solar water heating running from the installed water heater to the solar-ready roof areas, and those with roof areas that are not within 30 degrees of true south shall be plumbed to accommodate an on-demand tankless water heater. 3. A minimum of 10% of all single-family detached residential units at buildout shall either include an installed solar water heater, tankless water heater, or other energy efficient water heater technology approved by the County. 4. A minimum of 30% of all multi-family residential units at buildout shall have solar energy collection equipment, which shall be installed on roof areas facing within 30 degrees of true south. 5. <u>All</u> ~~A minimum of 70% of public and community~~ swimming ~~s~~pools constructed within the Project shall be heated by a solar water heating system or renewable power system that provides electricity for water heating. 6. A minimum of 60% of buildings located within Business Park land use designations at buildout shall have solar panel systems installed on roof and parking areas. Such systems shall be installed on roof areas facing within 30 degrees of true south.

The following edit was identified subsequent to publication of the Final EIR and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors. No further edits have been made to this text. MM 21-5 on page 5.21-89 of the Draft EIR is hereby revised as follows:

MM 21-5 The Project Applicant/Developer shall provide plans and specifications to the County demonstrating that all ~~a minimum of 70 percent of~~ public and community pools and spas shall be equipped with active solar heating systems where heating is necessary or desired. The Project Applicant/Developer shall provide the proposed plan for compliance with this provision prior to obtaining a permit for the pool.

MM 21-8 on page 5.21-90 is hereby revised as follows:

MM 21-8 Energy efficient major appliances and HVAC systems that meet the more stringent of applicable California Energy Commission (CEC) requirements or ENERGY STAR requirements, or equivalent, shall be ~~exclusively~~ offered by residential builders. Major appliances subject to this requirement include dishwashers, clothes washers, refrigerators, and room air conditioners.

The following edit was identified subsequent to publication of the Final EIR and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors. No further edits have been made to this text. MM 21-9 on page 5.21-90 of the Draft EIR is hereby revised as follows:

MM 21-9 The Project Applicant/Developer shall provide plans and specifications to the County that have been prepared in accordance with the Project Water Purveyor or alternate qualified public utility district requirements and standards, demonstrating that the Project's wastewater reclamation facilities (WRFs) shall ~~include equipment to~~ capture and reuse biogas for energy production.

The following edit was identified subsequent to publication of the Final EIR and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors. No further edits have been made to this text. MM 21-9 on page 5.21-90 of the Draft EIR is hereby revised as follows:

MM 21-14 Ten percent of all homes in Centennial communities that permit housing, with the exception of the lowest density area (Community 8-2) will be affordable, in conformance with the Affordable Housing Implementation Plan (see Appendix 3-H of the Centennial Specific Plan).*

**Note:* Independent of this measure, the Project Applicant/Developer has voluntarily agreed to a higher affordability percentage than imposed by this measure as part of the Development Agreement. *See* Item 11 (entitled

"Affordable Home Ownership and Rental Housing Program") in Exhibit G of the Development Agreement.

MM 21-15 on page 5.21-91 is hereby revised as follows:

MM 21-15 The Project Applicant/Developer shall provide plans and specifications to the County demonstrating that one 208/240 VAC receptacle that may be used for charging electric vehicles, shall be installed in each detached and attached single-family residence in a manner consistent with 2016 CALGreen Code Voluntary Tier 1 Section A4.106.4.1. The installation shall comply with requirements of the 2016 CALGreen Code Section 4.106.4.1, or the most applicable code at the time of construction.

The following further edit was identified subsequent to publication of the Final EIR and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors. No further edits have been made to this text. MM 21-15 and the first paragraph of MM 21-16 on page 5.21-91 of the Draft EIR are hereby revised as follows:

MM 21-15 The Project Applicant/Developer shall provide plans and specifications to the County demonstrating that one 208/240 VAC receptacle that may be used for charging electric vehicles, shall be installed in each detached and attached single-family residence in a manner consistent with 2016 CALGreen Code Voluntary Tier 1 Section A4.106.4.1. The installation shall comply with requirements of the 2016 CALGreen Code Section 4.106.4.1, or the most applicable code at the time of construction. The Project Applicant/Developer shall provide a further credit of $500 to 50 percent of future homeowners (as requested by homeowner) to pay for the type of charging device then in use for electric vehicles or, with County approval, to pay for other energy conservation uses. The availability of this EV incentive benefit shall be disclosed and promoted at the time of initial sale of single family homes and shall thereafter be promoted by the TMA on its website.

MM 21-16 The Project Applicant/Developer shall provide plans and specifications to the County demonstrating compliance with the Electric Vehicle Supply (EVS) charging station measures specified in MM 11-4. If and to the extent subsequently approved by the County, compliant with state laws, and resulting in no new significant impacts to the environment following County review and approval, EVS charging stations may be replaced by "alternative energy fueling stations" which may include other types of electric vehicle charging technology (e.g., operating at higher or lower voltages), or alternative

vehicular fuel technology that results in zero or near zero (as defined by CARB) GHG emission such as hydrogen fuel cells, biofuels, or other qualifying fuel technologies. ~~that "alternative energy fueling stations" shall be installed as follows. An "alternative energy vehicle fueling station" is a 208/240 VAC electrical vehicle charging station or a station providing another new or improved technology (e.g. compressed natural gas (CNG) and hydrogen fuel cell) that provides refueling for vehicles that do not use fossil fuel.~~ An electric charging station shall allow for simultaneous charging of two electric vehicles.

The second bullet of MM 21-16 on page 5.21-91 is hereby revised as follows:

- Multi-family residential buildings of at least seventeen ~~20~~ (17) residential units shall provide a minimum of one alternative energy vehicle fueling station for the first ~~twenty~~ seventeen (~~20~~ 17) residential units and an additional alternative energy vehicle fueling station for each additional ~~twenty~~ seventeen (~~20~~ 17) residential units thereafter.

The following edit was identified subsequent to publication of the Final EIR and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors. No further edits have been made to this text. The first bullet of MM 21-18 on page 5.21-92 of the Draft EIR is hereby revised as follows:

- Visitor parking shall include preferentially located parking spaces for ~~alternative-fueled~~ electric vehicles.

MM 21-19 on page 5.21-92 is hereby revised as follows:

MM 21-19 For parking structures and parking lots with 20 or more parking spaces that serve uses other than residential or nonresidential buildings (e.g., trailhead, park), and parking structures and parking lots that serve multifamily residential buildings with 17 or more multifamily units, the Project Applicant/Developer shall provide plans and specifications to the County demonstrating that the following features have been incorporated into the parking facility:

- The parking facility shall include a minimum of five percent preferentially located parking spaces for alternative-fueled (electric, natural gas, or similar low-emitting technology) vehicles.
- Five percent of ~~T~~the total number of parking spaces provided in the parking facility, but in no case less than one, shall be Electric Vehicle Parking Spaces (EV Spaces), as defined in CALGreen Code Section 202, capable of

supporting future Electric Vehicle Supply Equipment (EVSE), as defined in CALGreen Code Section 202 ~~include at least one electric vehicle charging station. Electrical lines shall be designed and sized to add additional charging stations for up to three percent of the total parking spaces when a demand is demonstrated.~~ Calculations for the required number of EV Spaces shall be rounded up to the nearest whole number and ~~T~~the design and installation of each EV space shall be consistent with Section A4.106.8.2, Residential Voluntary Measures, and Section 4.106.4.2, of the CALGreen Code as follows:

Single charging space requirements. When only a single EV Space is required, install a listed raceway capable of accommodating a dedicated branch circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall be securely fastened at the main service or subpanel and shall terminate in close proximity to the proposed location of the charging system into a listed cabinet, box or enclosure.

Multiple charging spaces required. When multiple EV Spaces are required, plans shall include the location(s) and type of EVSE, raceway method(s), wiring schematics and electrical calculations to verify that the electrical system has sufficient capacity to charge simultaneously all the electrical vehicles at all designated EV Spaces at their full rated amperage. Plan design shall be based on Level 2 EVSE at its maximum operating ampacity. Only underground raceways and related underground equipment are required to be installed at the time of construction.

- For residential parking facilities, bicycle parking shall be provided as specified in Section A4.106.9, Residential Voluntary Measures, of the CALGreen Code, or as required by County Code Section 22.52.1225B, whichever is more stringent.

The following further edit was identified subsequent to publication of the Final EIR and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors. No further edits have been made to this text. The first bullet of MM 21-19 on page 5.21-92 of the Draft EIR is hereby revised as follows:

- The parking facility shall include a minimum of five percent preferentially located parking spaces for ~~alternative-fueled (~~electric~~, natural gas, or similar low-emitting technology)~~ vehicles.

The following edit was identified subsequent to publication of the Final EIR and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors. No further edits have been made to this text. The first paragraph of MM 21-20 on page 5.21-92 of the Draft EIR is hereby revised as follows:

MM 21-20 The Project Applicant/Developer shall ensure that the implementation of the Green Development Program ~~takes into account compliance with the~~ that complies with all applicable legal requirements, including but not limited to the following regulations (as may be amended):

MMs 21-21 and 21-22 have hereby been added after MM 21-20 on page 5.21-94 as follows:

MM 21-21 The Project Applicant/Developer shall require contractors to use locally available and recycled building materials, provided such materials meet all applicable Building Code and other requirements, and are readily available and comparably priced to assure that such materials do not increase the cost and decrease the affordability of housing or community infrastructure.

MM 21-22 The Project parking lots shall be designed to reduce vehicle queuing and improve pedestrian safety. Parking lot access designs shall include self-enforcement features for reducing the speeds on driveways, such as speed bumps or curved driveways. The parking lots shall include clearly marked pedestrian pathways connecting building entrances to parking, sidewalk, and transit drop-off/pick-up locations.

Section 7 – Cumulative Impacts

The carryover paragraph on page 7-9 is hereby revised as follows:

> existing alignment of SR-138. The portion of SR-138 between 300th Street West and Gorman Post Road, which is applicable to the Project site, is envisioned by Caltrans to be a six-lane expressway. This alternative would involve at-grade signalized intersections at Cement Plant Road and 300th Street West; a grade-separated overcrossing at the Gorman Post Road intersection (same as Build Alternative 1); and a new grade separate structure (standard box culvert) east of Quail Lake near the airport (same as Build Alterative 1). Same as Build Alternative 1, this alternative would include an extension of the existing RCB culvert at the Quail Lake Outlet into the west branch of the California Aqueduct. In June 2017 the Final EIR/EIS identified Alternative 2 (Expressway/Highway) as the preferred alternative. Alternative 2 would include a 6-lane freeway from the I-5 interchange to Gorman Post Road, a 6-lane Expressway from Gorman Post Road to 300th Street West, a 4-lane expressway from 300th Street West to 240th Street West, and a 4-lane limited access conventional highway from 240th Street West to the SR-14 interchange, generally following the existing alignment of SR-138. A Supplemental Traffic Study (STS) has been prepared to incorporate the preferred Alternative 2 for SR-138 into the Project analysis. The STS is attached as Appendix 5.10-C of this Final EIR. The STS evaluates potential impacts using the Highway Capacity Manual (HCM) methodology and the North County Sub-Area Model utilized in the NW SR-138 Final EIR/EIS as updated by Los Angeles County to reflect the Antelope Valley Area Plan approved by the County in June 2015. The STS determined that the implementation of Alternative 2, and additional improvements to SR-138 that may be required under cumulative conditions with full Project buildout, will not result in any new or more severe significant physical construction and operational impacts than considered in the NW SR-138 Final EIR/EIS and the Project Draft EIR. The STS also demonstrates that, using the HCM methodology, the Project will not result in any new or more severe significant impacts to applicable highway segments, intersections and ramps than considered in the Project Draft EIR.

The third sentence of the last paragraph on page 7-14 is hereby revised as follows:

> In addition, ~~two~~ three sites within the open space areas (CA-LAN-3206, CA-LAN-3217, and CA-LAN-3227) would be treated as eligible and protected from secondary impacts as they are immediately adjacent to the development footprint.

The first full bullet point on page 7-16 is hereby revised as follows:

- The ~~open space~~ Mitigation P~~p~~reserve proposed as part of the Project, the resource protection provided in the nearby National Forest lands, and the Los Angeles County Significant Ecological Areas in the area together encompass a large portion of the region and provide a valuable haven for species as other parts of the region are developed.

The third sentence of the second full paragraph on page 7-16 is hereby revised as follows:

> Implementation of the Project's mitigation measures would enhance, restore, and create these vegetation types within the proposed ~~open space~~ Mitigation P~~p~~reserve and would therefore reduce impacts to less than significant levels for all vegetation types except native grasslands.

The fourth sentence of the last partial paragraph on page 7-19 is hereby revised as follows:

> The proposed ~~Centennial Transportation Improvement Program (CTIP)~~ Traffic Mitigation Agreement provides a mechanism for the needed transportation improvements to be implemented by providing advance funding for planning, design, and construction of certain improvements and establishing a funding program to collect fair shares for other improvements.

The following edit was identified subsequent to publication of the Final EIR, and is presented in this consolidated Final EIR for the consideration of the Board of Supervisors. No further edits have been made to this text. The first sentence of the second full paragraph on page 7-26 is hereby revised as follows:

> As described in Section 5.17.3, construction of the Project is estimated to result in approximately 180,873 ~~150,728~~ tons of construction wastes requiring disposal over the 20-year Project buildout period, after waste diversion; this is approximately 9,044 ~~7,537~~ tons per year or 34.8 ~~29.0~~ tons per day.

Section 8 – Alternatives to the Proposed Project

Table 8-1 on page 8-15 is hereby revised as follows:

TABLE 8-1
CENTENNIAL SPECIFIC PLAN ALTERNATIVES COMPARISON

	Centennial Project	Alternative A No Project	Alternative B Previously Proposed Project	Alternative C Additional Drainage Avoidance	Alternative D Infrastructure Relocation	Alternative E Density Clustering/East of Aqueduct	Alternative F Central EOA Development
Project Site	12,323 ac	12,323 ac	11,676 ac	12,323 ac	12,323 ac	12,323 ac	12,323 ac (within 23,930-ac EOA)
Open Space	5,624 ac	12,323 ac [a]	3,829 ac	5,661 ac	5,612 ac	6,280 ac	5,624 ac
Residential Area	4,987 ac	0 ac	3,982.5 ac	4,952 ac	4,984 ac	4,519 ac	4,987 ac
Dwelling Units	19,333 du	0 du	22,998 du	19,241 du	19,333 du	19,333 du	19,333 du
Non-Residential Area [a]	699 ac	0 ac	884.5 ac	678 ac	699 ac	650 ac	699 ac
Non-Residential Floor Area (msf)	10.10 msf	0 msf	14.22 msf	9.90 msf	10.10 msf	10.10 msf	10.10 msf
Civic and Institutional Uses [b]	~~684~~ 685 ac	0 ac	943.3 ac	699 ac	720 ac	632 ac	~~684~~ 685 ac
Public Rights-of-Way [c]	327 ac	0 ac	~~2,036.7~~ 627.8 ac [c]	327 ac	327 ac	303 ac	327 ac
Developed Land Use	7,207 ac [d]	Existing	7,847 ac	7,170 ac [e]	7,223 ac [f]	6,551 ac [g]	7,207 ac [d]
Open Space: Natural/Unimpacted	5,116 ac	Existing	3,829 ac	5,153 ac	5,100 ac	5,772 ac	5,116 ac

EOA: Economic Opportunity Area; ac: acres; du: dwelling unit; msf: million square feet

[a] includes Commercial, Business Park, and Employment areas
[b] includes Schools, Golf Course, Parks, and Utilities
[c] includes roads, greenways, internal slopes
[d] includes 6,698 acres of developed hardspace and 509 acres of graded open space within the grading footprint
[e] includes 6,656 acres of developed hardspace and 509 acres of graded open space within the grading footprint
[f] includes 6,730 acres of developed hardspace and 496 acres of graded open space within the grading footprint
[g] includes 6,104 acres of developed hardspace and 1,164 acres of graded open space within the grading footprint

Note: Acreage for all categories is conceptual gross acreage and does not include transitional slopes and/or internal slopes. Actual totals may vary with future detailed planning. Total for Project site may not add due to rounding.

The fourth paragraph in Table 8-3, row one, column two, on pages 8-69 and 8-70 is hereby revised as follows:

> However, Alternative~~s~~ C ~~and D~~ would provide less development than the Project. Under thi<u>s</u>~~se~~ alternative, the County would not be able to achieve housing and employment levels anticipated by the AVAP and associated with the adopted growth projections unless development occurs in excess of projections in other areas of the Antelope Valley.

Appendix 5.4-A – Centennial Project Water Quality Technical Report

The following text is hereby added immediately before the italicized heading "Municipal Recycled Water Landscape Irrigation Use Permit" on page 36:

> <u>*Water Reclamation Requirements for Recycled Water Use*</u>
>
> <u>In June 2016, the State Water Resources Control Board adopted General Order No. 2016-0068-DDW. The Order provides a streamlined Notice of Applicability process for the beneficial, non- potable use of recycled water consistent with the California Uniform Statewide Recycling Criteria, except recycled water use to replenish groundwater resources, the disposal of treated wastewater in percolation ponds, and excessive hydraulic loading of recycled water in use areas where the primary purpose of the activity is disposal of treated wastewater and direct potable reuse. General Order No. 2016-0068-DDW encourages recycled water use and reduced demand on potable water supplies by (1) maintaining a streamlined approach in permitting new recycled water users through a water recycling program and (2) providing the option for a single recycled water use permit coverage for larger users that typically need permit coverage from multiple Regional Water Boards. The Order is applicable to recycled water projects where recycled water is used or transported for non-potable uses, such as landscape irrigation, irrigation of crops and pasture land, construction, fire suppression, and hydrostatic testing. The Order does not regulate the treatment of wastewater, and compliance with the Order does not relieve producers or distributors from the obligation to comply with applicable Waste Discharge Requirements (WDRs) for discharges from wastewater treatment plants, other than the recycled water uses described in the Order.</u>
>
> <u>An applicant must submit a notice of intent (NOI) to obtain coverage under the Order. The applicant must declare responsibility for the administration of the water recycling program authorized pursuant to the Order and describe a program the applicant will administer to ensure that recycled water use complies with the requirements of the Uniform Statewide Recycling Criteria and the Order. Once coverage is authorized, the applicant then becomes the administrator for the covered water recycling program. The Order includes specific recycled water recycling administration requirements and other reporting and monitoring requirements.</u>

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4.2 CLARIFICATIONS AND REVISIONS TO RESPONSES PREVIOUSLY PUBLISHED IN THE FINAL EIR

Following the publication of the Final EIR in May 2018 and the subsequent addenda resulting from each Regional Planning Commission Hearing, typographical errors were identified. These errors pertain solely to: (1) the solar heating of all, rather than 70 percent, of pools and spas; and (2) reference to a Mitigation Preserve Management Plan, which does not exist, instead of the Ranch-wide Management Plan. All instances of these errors in the Final EIR and subsequent addenda are hereby revised as listed below, and are presented in this Consolidated Final EIR for the consideration of the Board of Supervisors. No further edits have been made to this text.

The information included in these clarifications and revisions to responses previously published in the Final EIR does not constitute substantial new information that requires recirculation of the Draft EIR pursuant to Section 15088.5 of the State CEQA Guidelines. Recirculation of the Draft EIR is not required because the new information added to the EIR through these modifications clarifies or amplifies information already provided or makes insignificant modifications to the already adequate Draft EIR.

The clarifications and revisions to the Final EIR contained in Section 4.2 are in the same order as the information appears in the Draft EIR. Changes in text are signified by strikeouts (~~strikeouts~~) where text has been removed and by double underlining (<u>underline</u>) where text has been added.

Response to Comment B.4-25

The third sentence of Response to Comment B.4-25 is hereby revised as follows:

> Regarding point 2 of the comment, the Draft EIR discusses impacts to the burrowing owl on page 5.7-150, while impacts to individuals is considered potential significant and ~~imitation~~ <u>mitigation</u> is provided, the loss of habitat is determined to be adverse but less than significant.

Response to Comment F.8-79

Response to Comment F.8-79 is hereby revised as follows:

> In addition, MM 21-5 requires the Project to equip ~~a minimum of 70 percent of~~ <u>all</u> public and community pools and spas with active solar water hearing systems where heating is necessary or desired, and MM 21-2 requires the Project Applicant/Developer to provide all single-family homebuyers the option to include a photovoltaic array system as a home design feature.

Response to Comment F.8-95

Response to Comment F.8-95 is hereby revised as follows:

> Specifically, regarding renewable energy production, MM 21-1 requires the Project Applicant/Developer to provide the County with plans and specifications that demonstrate 50 percent of the Project's anticipated electrical energy demand at buildout shall be satisfied from on-site renewable energy generation, which may include, but is not limited to, solar, geothermal, biofuel and hydroelectric systems. In addition, MM 21-5 requires the Project to equip ~~a minimum of 70 percent of~~ all public and community pools and spas with active solar water hearing systems where heating is necessary or desired, and MM 21-2 requires the Project Applicant/Developer to provide all single-family homebuyers the option to include a photovoltaic array system as a home design feature.

Response to Comment F.8-204

Row 215 of response to Comment F.8-204 is hereby revised as follows:

> Further, per MM 21-5, the Project Applicant/Developer shall provide plans and specifications to the County demonstrating that ~~a minimum of 70 percent of~~ all public and community pools and spas shall be equipped with active solar heating systems where heating is necessary or desired. (*Id.,* p. 5.21-89)

Response to Comment F.8-204

Row 216 of response to Comment F.8-204 is hereby revised as follows:

> Per MM 21-5, the Project Applicant/Developer shall provide plans and specifications to the County demonstrating that ~~a minimum of 70 percent of~~ all public and community pools and spas shall be equipped with active solar heating systems where heating is necessary or desired. (Id., p. 5.21-89)

Response to Comment F.8-204

Row 220 of response to Comment F.8-204 is hereby revised as follows:

> Per MM 21-5, the Project Applicant/Developer shall provide plans and specifications to the County demonstrating that ~~a minimum of 70 percent of~~ all public and community pools and spas shall be equipped with active solar heating systems where heating is necessary or desired. (DRP 2017, p. 5.21-89)

Response to Comment F.8-204

Row 297 of response to Comment F.8-204 is hereby revised as follows:

~~A minimum of 70 percent of~~ All public and community pools and spas shall be equipped with active solar heating systems where heating is necessary or desired.

Response to Comment F.8-204

Row 411 of response to Comment F.8-204 is hereby revised as follows:

Further, per MM 21-5, the Project Applicant/Developer shall provide plans and specifications to the County demonstrating that ~~a minimum of 70 percent of~~ all public and community pools and spas shall be equipped with active solar heating systems where heating is necessary or desired. (Id., p. 5.21-89)

Response to Comment F.3A-46

Response to Comment F.3A-46 is hereby revised as follows:

> With respect to this comment's recommended mitigation measures regarding renewable energy production, the EIR includes functionally equivalent measures. Specifically, MM 21-1 requires the Project Applicant/Developer to provide the County with plans and specifications that demonstrate 50 percent of the Project's anticipated electrical energy demand at buildout shall be satisfied from on-site renewable energy generation, which may include, but is not limited to, solar, geothermal, biofuel and hydroelectric systems in a manner consistent with the Specific Plan. In addition, MM 21-5 requires the Project to equip ~~a minimum of 70 percent of~~ all public and community pools and spas with active solar water heating systems where heating is necessary or desired, and MM 21-2 requires the Project Applicant/Developer to provide all single-family homebuyers the option to include a photovoltaic array system as a home design feature.

Response to Comment F.3A-71

Response to Comment F.3A-71 is hereby revised as follows:

> In addition, MM 21-5 requires the Project to equip ~~a minimum of 70 percent of~~ all public and community pools and spas with active solar water heating systems where heating is necessary or desired, and MM 21-2 requires the Project to comply with CALGreen Code voluntary measure A4.203.1.2.1 Tier 1 for newly-constructed low-rise residential buildings, thus ensuring that these buildings will exceed the 2016 Title 24 energy efficiency requirements by 15 percent.

Responses to Comments B.4-64 and F.8-18, and Clarifications and Revisions to Section 4.0 – Project Description

Responses to Comments B.4-64 and F.8-18, and the clarifications and revisions to Section 4.0, Project Description, of the Draft EIR presented in the Final EIR published May 2018 are hereby revised as follows:

In addition, to clarify the scope of permitted uses within the open space areas associated with the Project, four open space subdesignations (three on-site, one off-site) are hereby added to page 4-24 of Section 4.0, Project Description of the Draft EIR, and conforming edits are made to the Specific Plan:

CENTENNIAL OPEN SPACE DEFINITIONS

Mitigation Preserve: The Mitigation Preserve encompasses 43,079 acres of land to be preserved and managed in perpetuity for biological resources values. The Preserve consists of an On-site Mitigation Preserve, comprised of approximately 3,866 acres within the Project boundaries, but outside of the development footprint, and an Off-site Mitigation Preserve made up of 39,213 acres within adjacent and nearby off-site lands. These mitigation lands provide sufficient land and biological resource values to implement mitigation strategies to fully mitigate for Project biological resource impacts.

On-site Mitigation Preserve

The On-site Mitigation Preserve is divided into two areas. The southern on-site mitigation area includes 968 acres located immediately south of the development footprint along south side of SR-138. The northern on-site mitigation area consists of 2,898 acres located to the north and west of the development footprint on the west side of the aqueduct. All of the lands within the on-site portion of the Mitigation Preserve are within Los Angeles County SEA No. 17.

Uses within the On-site Mitigation Preserve shall be restricted to use and continued maintenance of existing ranch roads and trails for access as well as hiking and biking for private inholding owners and permitted Ranch guests. Public access and recreational hunting shall be prohibited. Authorized motorized vehicles including but not limited to Tejon Ranch employees, utility maintenance vehicles, that have a Tejon Ranch permit and emergency vehicles shall be restricted to existing ranch roads and all recreational motorized vehicles shall be prohibited. No improvements beyond what is necessary to maintain roads, fences, etcetera, in their current state shall be allowed, with the exception of the placement of two new water towers discussed below. Only habitat enhancement, restoration and creation activities approved by the County and described in the ~~Mitigation Preserve~~ Ranch-wide Management Plan shall be permitted. New impacts shall be limited to the placement of two

water towers with disturbance impacts of no more than five acres each. Grazing shall be allowed to continue as directed by the ~~Mitigation Preserve~~ Ranch-wide Management Plan strictly for resource management values.

Off-site Mitigation Preserve

The Off-site Mitigation Preserve is divided into seven areas. Area 1 consists of 6,417 acres located adjacent to and immediately east of the southeastern corner of the Project site. Area 2 consists of 2,556 acres located adjacent and contiguous to the northwestern portions of the Project site. Nearly all of the land within these two preserve areas also occurs within SEA No. 17. Area 3 consists of 4,183 acres; this mitigation area is located in Kern County, immediately north of the Project site. Area 4 consists of 7,319 acres located on the northern slope of the Antelope Valley, northeast of both Area 3 and the Project site. Area 5 consists of 643 acres and is a square-shaped parcel located in Kern County on the northern slope of the Antelope Valley, immediately east of Area 4 and northeast of the Project site. Area 6 consists of 2,429 acres and is located in Kern County on the northern slope of the Antelope Valley, farthest to the northeast of the Centennial Project site. Area 7 (two distinct portions) consists of a combined 15,668 acres located in Kern County on the northern slope of the Antelope Valley. The westernmost portion of Area 7 sits between Areas 3 and 4, while the easternmost portion occurs east of Area 4 and boarders Area 6 to the north. The combined off-site Mitigation Preserve area amounts to 39,213 acres of mitigation lands. Cumulatively, both on and off-site, the Mitigation Preserve encompasses 43,079 acres of Project mitigation lands. The majority of three of these areas, Areas 3, 4, and 5 are the subject of conservation easements, therefore, although available for mitigation including enhancement, restoration, and creation, are not available for mitigation acreage value as preservation.

Uses within the Off-site Mitigation Preserve shall be restricted to use and continued maintenance of existing ranch roads and trails for access as well as hiking and biking for private inholding owners and permitted Ranch guests. Public access shall be prohibited. Authorized motorized vehicles including but not limited to Tejon Ranch employees, utility maintenance vehicles, that have a Tejon Ranch permit and emergency vehicles shall be restricted to existing ranch roads and all recreational motorized vehicles shall be prohibited. No improvements beyond what is necessary to maintain roads, fences, etcetera, in their current state shall be allowed, Recreational hunting shall be restricted to Ranch authorized individuals and within designated hunting areas only. Only habitat enhancement, restoration and creation activities approved by the County and described in the ~~Mitigation Preserve~~ Ranch-wide Management Plan shall be permitted. Grazing shall be allowed to continue as directed by the ~~Mitigation Preserve~~ Ranch-wide Management Plan strictly for resource management values.

Green Space

Disturbed Green Space consists of areas within the project boundary that are impacted and will need to be mitigated. Disturbed Green Space will be amenities for the Project and could include one or more of the following uses: golf course, equestrian, natural parks, trails, cultural monuments, water retention basins, open space uses, utilities, grading, crop production, grazing, special events, and mitigation activities. No Mitigation credit has been taken into account for the Project impacts from the Green Spaces. While Green Spaces could be impacted initially, the concept of these areas is to restore it for community amenities and visual aesthetics between neighborhoods of development.

Undisturbed Green Space consists of areas within the project boundary that are not impacted and require no mitigation. There is no project mitigation credit taken for preserving these areas. To preserve these areas and to make sure there is no future mitigation needed, the uses are restricted to the following: Continued maintenance of existing ranch roads and trails for access as well as hiking and biking for private inholding owners and permitted Ranch guests. Public access and recreational hunting shall be prohibited. Authorized motorized vehicles including but not limited to Tejon Ranch employees, utility maintenance vehicles, that have a Tejon Ranch permit and emergency vehicles shall be restricted to existing ranch roads and all recreational motorized vehicles shall be prohibited. Restricted access signage shall be posted along interface with public areas. Wildlife friendly fencing will be used to demarcate the edge of restricted access green space.

In addition, MM 7-23 is hereby added to Draft EIR Section 5.7.7, as follows:

MM 7-23 Notwithstanding any provision of the Centennial Specific Plan to the contrary, land designated by the Centennial Specific Plan as On-Site Mitigation Preserve, Off-Site Mitigation Preserve, Disturbed Green Space, and Undisturbed Green Space shall only be used in a manner consistent with the following land use restrictions:

On-Site Mitigation Preserve: Uses within the On-site Mitigation Preserve shall be restricted to use and continued maintenance of existing ranch roads and trails for access as well as hiking and biking for private inholding owners and permitted Ranch guests. Public access and recreational hunting shall be prohibited. Authorized motorized vehicles including but not limited to Tejon Ranch employees, utility maintenance vehicles, that have a Tejon Ranch permit and emergency vehicles shall be restricted to existing ranch roads and all recreational motorized vehicles shall be prohibited. No improvements beyond what is

necessary to maintain roads, fences, etcetera, in their current state shall be allowed, with the exception of the placement of two new water towers discussed below. Only habitat enhancement, restoration and creation activities approved by the County and described in the ~~Mitigation Preserve~~ Ranch-wide Management Plan shall be permitted. New impacts shall be limited to the placement of two water towers with disturbance impacts of no more than five acres each. Grazing shall be allowed to continue as directed by the ~~Mitigation Preserve~~ Ranch-wide Management Plan strictly for resource management values.

Off-Site Mitigation Preserve: Uses within the Off-site Mitigation Preserve shall be restricted to use and continued maintenance of existing ranch roads and trails for access as well as hiking and biking for private inholding owners and permitted Ranch guests. Public access shall be prohibited. Authorized motorized vehicles including but not limited to Tejon Ranch employees, utility maintenance vehicles, that have a Tejon Ranch permit and emergency vehicles shall be restricted to existing ranch roads and all recreational motorized vehicles shall be prohibited. No improvements beyond what is necessary to maintain roads, fences, etcetera, in their current state shall be allowed, Recreational hunting shall be restricted to Ranch authorized individuals and within designated hunting areas only. Only habitat enhancement, restoration and creation activities approved by the County and described in the ~~Mitigation Preserve~~ Ranch-wide Management Plan shall be permitted. Grazing shall be allowed to continue as directed by the ~~Mitigation Preserve~~ Ranch-wide Management Plan strictly for resource management values.

Disturbed Green Space: Uses within Disturbed Green Space shall be restricted to one or more of the following: golf course, equestrian, natural parks, trails, cultural monuments, water retention basins, open space uses, utilities, grading, crop production, grazing, special events, and mitigation activities.

Undisturbed Green Space: Uses within Undisturbed Green Spaces shall be restricted to one or more of the following: continued maintenance of existing ranch roads and trails for access as well as hiking and biking for private inholding owners and permitted Ranch guests. Public access and recreational hunting shall be prohibited. Authorized motorized vehicles including but not limited to Tejon Ranch employees, utility maintenance vehicles, that have a Tejon Ranch permit and

emergency vehicles shall be restricted to existing ranch roads and all recreational motorized vehicles shall be prohibited. Restricted access signage shall be posted along interface with public areas. Wildlife friendly fencing will be used to demarcate the edge of restricted access green space.

Response to Comment B.4-65

Response to Comment B.4-65 is hereby revised as follows:

The vast majority of the Project's open space will be designated as On-Site Mitigation Preserve or Undisturbed Green Space. Pursuant to the new mitigation measure described in response to Comment B.4-64, within the On-Site Mitigation Preserve no improvements beyond what is necessary to maintain roads and fences will be allowed, with the exception of the placement of two water towers with a maximum disturbance of five acres each. Moreover, habitat enhancement, restoration and creation may only occur as described in the Project's ~~Mitigation Preserve~~ Ranch-wide Management Plan and must be approved by the County. Public access and recreational hunting will also be prohibited on this land, though hiking and biking for private inholding owners and permitted Ranch guests would be permitted. Authorized motorized vehicles including, but not limited to Tejon Ranch employees, utility maintenance vehicles that have a Tejon Ranch permit, and emergency vehicles will be restricted to existing ranch roads and all recreational motorized vehicles will also be prohibited within the On-Site Mitigation Preserve. Grazing within the On-Site Mitigation Preserve will be allowed to continue strictly for resource management values and as directed by the ~~Mitigation Preserve~~ Ranch-wide Management Plan.

Clarifications and Revisions to Section 1 – Executive Summary

Clarifications and revisions to Table 1-2, Centennial Specific Plan Mitigation Summary, of the Draft EIR presented in the Final EIR published May 2018 is hereby revised as follows:

TABLE 1-2
CENTENNIAL SPECIFIC PLAN MITIGATION SUMMARY

#	Environmental Factor	Mitigation
5.7	**Biological Resources**	**MM 7-23** Notwithstanding any provision of the Centennial Specific Plan to the contrary, land designated by the Centennial Specific Plan as On-Site Mitigation Preserve, Off-Site Mitigation Preserve, Disturbed Green Space, and Undisturbed Green Space shall only be used in a manner consistent with the following land use restrictions: On-Site Mitigation Preserve: Uses within the On-site Mitigation Preserve shall be restricted to use and continued maintenance of existing ranch roads and trails for access as well as hiking and biking for private inholding owners and permitted Ranch guests. Public access and recreational hunting shall be prohibited. Authorized motorized vehicles including but not limited to Tejon Ranch employees, utility maintenance vehicles, that have a Tejon Ranch permit and emergency vehicles shall be restricted to existing ranch roads and all recreational motorized vehicles shall be prohibited. No improvements beyond what is necessary to maintain roads, fences, etcetera, in their current state shall be allowed, with the exception of the placement of two new water towers discussed below. Only habitat enhancement, restoration and creation activities approved by the County and described in the Ranch-wide ~~Mitigation Preserve~~ Management Plan shall be permitted. New impacts shall be limited to the placement of two water towers with disturbance impacts of no more than five acres each. Grazing shall be allowed to continue as directed by the Mitigation Preserve Management Plan strictly for resource management values. Off-Site Mitigation Preserve: Uses within the Off-site Mitigation Preserve shall be restricted to use and continued maintenance of existing ranch roads and trails for access as well as hiking and biking for private inholding owners and permitted Ranch guests. Public access shall be prohibited. Authorized motorized vehicles including but not limited to Tejon Ranch employees, utility maintenance vehicles, that have a Tejon Ranch permit and emergency vehicles shall be restricted to existing ranch roads and all recreational motorized vehicles shall be prohibited. No improvements beyond what is necessary to maintain roads, fences, etcetera, in their current state shall be allowed, Recreational hunting shall be restricted to Ranch authorized individuals and within designated hunting areas only. Only habitat enhancement, restoration and creation activities approved by the County and described in the Ranch-wide ~~Mitigation Preserve~~ Management Plan shall be permitted. Grazing shall be allowed to continue as directed by the Ranch-wide ~~Mitigation Preserve~~ Management Plan strictly for resource management values. Disturbed Green Space: Uses within Disturbed Green Space shall be restricted to one or more of the following: golf course, equestrian, natural parks, trails, cultural monuments, water retention basins, open space uses, utilities, grading, crop production, grazing, special events, and mitigation activities. Undisturbed Green Space: Uses within Undisturbed Green Spaces shall be restricted to one or more of the following: continued maintenance of existing ranch roads and trails for access as well as hiking and biking for private inholding owners and permitted Ranch guests. Public access and recreational hunting shall be prohibited. Authorized motorized vehicles including but not limited to Tejon Ranch employees, utility maintenance vehicles, that have a Tejon Ranch permit and emergency vehicles shall be restricted to existing ranch roads and all recreational motorized vehicles shall be prohibited. Restricted access signage shall be posted along interface with public areas. Wildlife friendly fencing will be used to demarcate the edge of restricted access green space.

Clarifications and Revisions to Section 5.21 – Climate Change

Clarifications and revisions to 5.21-11, Centennial Project Compliance with the Los Angeles County Community Climate Action Plan, of the Draft EIR presented in the Final EIR published May 2018 is hereby revised as follows:

TABLE 5.21-11
CENTENNIAL PROJECT COMPLIANCE WITH THE LOS ANGELES COUNTY COMMUNITY CLIMATE ACTION PLAN

Existing Initiatives and New CCAP Actions	Centennial Implementation Actions
BE-3: Solar Installations are encouraged for new and existing buildings	Renewable energy produced within the Project would provide a minimum of 50% of the Project's anticipated electricity demand. Specific metrics to achieve this goal include: 1. A minimum of 100% of all single-family detached residential units at buildout shall be pre-wired to support solar energy collection equipment and a minimum of 30% of all single-family detached residential units at buildout shall have solar energy collection equipment installed on roof areas or on top of other structures on the site (e.g., patio covers or pergolas). 2. Single-family detached residential units with roof areas that are within 30 degrees of true south shall include plumbing appropriate for a solar water heating running from the installed water heater to the solar-ready roof areas, and those with roof areas that are not within 30 degrees of true south shall be plumbed to accommodate an on-demand tankless water heater. 3. A minimum of 10% of all single-family detached residential units at buildout shall either include an installed solar water heater, tankless water heater, or other energy efficient water heater technology approved by the County. 4. A minimum of 30% of all multi-family residential units at buildout shall have solar energy collection equipment, which shall be installed on roof areas facing within 30 degrees of true south. 5. <u>All</u> ~~A minimum of 70% of public and community~~ swimming ~~s~~pools constructed within the Project shall be heated by a solar water heating system or renewable power system that provides electricity for water heating. 6. A minimum of 60% of buildings located within Business Park land use designations at buildout shall have solar panel systems installed on roof and parking areas. Such systems shall be installed on roof areas facing within 30 degrees of true south.

4.3 CONFORMED AND ANNOTATED DRAFT EIR SECTION 5.21, *CLIMATE CHANGE*

Section 5.21 – Climate Change

Annotation 1:

For clarification and ease of reference, this "conformed and annotated" EIR Section 5.21, *Climate Change*, compiles into a single document all revisions made to Chapter 5.21 following the May 2017 publication of the Draft Environmental Impact Report (DEIR). All such revisions made after publication of the DEIR and prior to publication of the Final Environmental Impact Report (FEIR) were initially disclosed in FEIR, Section 3.0, *Draft EIR Clarifications and Revisions*. All such revisions made after publication of the FEIR were disclosed in the *Updated Greenhouse Gas Calculations for the Centennial Project Final Environmental Impact Report* (the "Updated GHG Report") presented to the Regional Planning Commission at its August 29, 2018 hearing. This conformed and annotated version of Chapter 5.21 compiles all such revisions into a single document, as shown in so-called "redlined" double underline and ~~strikethrough~~ text herein.

This "conformed and annotated" EIR Section 5.21, *Climate Change*, also sets forth a series of annotations that explain the conclusions of the Updated GHG Report presented to the Regional Planning Commission at its August 29, 2018 Project hearing, and to the Board of Supervisors at its December 11, 2018 Project hearing. The Updated GHG Report was prepared by Psomas, the Lead Agency's environmental consultant, to compare the Project's GHG emissions calculated in the DEIR ("DEIR Quantified GHG Emissions") with an updated analysis completed at the Lead Agency's request ("Updated GHG Calculations"). For ease of reference, a complete copy of the Updated GHG Report is attached to this "conformed and annotated EIR Section 5.21, *Climate Change*.

The revisions and annotations set forth herein, and the Updated GHG Report, do not constitute "significant new information" that requires recirculation of the Draft EIR. Under section 15088.5 of the CEQA Guidelines, recirculation of an EIR is required when "significant new information" is added to the EIR after public notice is given of the availability of the Draft EIR for public review but prior to certification of the Final EIR. The term "information" can include changes in the project or environmental setting, as well as additional data or other information. New information added to an EIR is not "significant" unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project's proponents have declined to implement. (CEQA Guidelines, § 15088.5.) To the extent the revisions and annotations set forth herein, and the Updated GHG Report, included new information, such information clarifies or amplifies the information set forth in the Draft EIR by, for example, updating the Draft EIR's quantification of Project GHG emissions by using the most current version of the California Emissions Estimator Model (CalEEMod) and by factoring in emission reductions associated with regulatory requirements adopted following publication of the Draft EIR, as explained below.

As explained in the Updated GHG Report, and in the annotations that follow this Annotation 1, the Updated GHG Calculations show that Project-specific GHG emissions will be

approximately 35 percent lower than the quantitative estimates included in the DEIR, based on GHG legal reduction mandates that were not in effect when the DEIR GHG emissions were calculated, more advanced GHG quantification methodologies, including newer versions of GHG emission models, and the quantification of GHG emissions from Project mitigation measures that reduce GHG emissions.[1]

The Updated GHG Calculations include: (1) emissions estimates from the most current version (16.3.2) of CalEEMod, which was made available after publication of the DEIR; (2) updated information regarding applicable electric vehicle (EV) adoption rates and quantified GHG emissions associated with EV charging stations; (3) estimated internal and external trip reductions attributable to the Project's single occupancy vehicle (SOV) mitigation measures; (4) updated estimates of the Project's water and wastewater energy use and emissions; and (5) revised estimates of the Project's solid waste GHG emissions based on applicable landfill diversion mitigation requirements.[2]

1. Updated GHG Report at 1.
2. *Id*. at 1-2.

5.21.1 – Introduction

Purpose

The County of Los Angeles Department of Regional Planning Environmental Checklist Form, which has been prepared pursuant to the California Environmental Quality Act (CEQA), requires that greenhouse gas (GHG) emissions issues be evaluated as part of the environmental documentation process. Because the effects of GHG emissions are considered in a global context, that is, global warming and climate change, GHG emissions are generally addressed as a cumulative issue. However, plan-level direct and indirect impacts are also addressed. Growth-inducing impacts and cumulative impacts are described in Sections 6.0 and 7.0 of this Environmental Impact Report (EIR), respectively. Because the topic of climate change is most appropriately considered on a cumulative level, the impact analysis in this EIR section is fundamentally a cumulative analysis. Therefore, the discussion in Section 7.0, Cumulative Impacts, presents a summary of the conclusions of this section.

Summary

The County acknowledges the consensus among leading scientists that without action to reduce GHG emissions, climate change due to global warming will pose a considerable threat to the environment and to human health and society (DRP 2015a). The *Final Unincorporated Los Angeles County Community Climate Action Plan 2020* (CCAP) is part of the County General Plan and was adopted along with the General Plan on October 6, 2015.

In accordance with CEQA Guidelines 15183.5(b), the CCAP provides that projects that "demonstrate consistency with applicable CCAP actions can be determined to have a less than significant cumulative impact on GHG emissions and climate change". The Project's design concepts are consistent with the CCAP, as summarized in Table 5.21-11, Centennial Project Compliance With Los Angeles County Community Climate Action Plan. The Project's

Green Development Program includes elements specifically created to reduce GHG emissions. These elements are delineated in the analysis below as project design features (PDFs). The analysis of Project consistency with each of the CCAP goals and policies shows that the Project is consistent with the CCAP.

Additional analysis under Threshold 21-1, and in Section 5.8, Land Use, Entitlements, and Planning, and in Table 5.8-1, shows that the Project would not conflict with applicable goals and policies of the Antelope Valley Area Plan (AVAP). Moreover, the analysis under Threshold 21-2 below shows that the Project would not conflict with the Southern California Association of Governments (SCAG) 2012–2035 Regional Transportation Plan Sustainable Communities Strategy (RTP/SCS) and 2016–2040 RTP/SCS.

The quantification of greenhouse gas emissions as calculated through the California Emissions Estimator Model (CalEEMod) Version 2016.3.1 estimates that the Project at buildout in 2035 would have GHG emissions of approximately 244,379 metric tons of carbon dioxide equivalent ($MTCO_2e$) per year as shown in Table 5.21-1. Project GHG emissions as shown in column 2 (Emissions $MTCO_2e$) of Table 5.21-1 include quantified reductions from project design features and mitigation measures (e.g., mixed use development community design, solar electricity generation, etc.), as further discussed in Section 5.21.6, Environmental Impacts. This total includes amortized emissions from the construction period, the loss of carbon-sequestering vegetation, and the planting of carbon-sequestering trees.

TABLE 5.21-1
OPERATIONAL AND TOTAL GHG EMISSIONS

GHG Sources	Emissions $MTCO_2e$	Percent of Operational Emissions
Operational	239,215	
Area	11,297	5%
Energy	49,414	21%
Mobile	160,904	67%
Solid waste	10,214	4%
Water	7,387	3%
Construction	*4,490*	
Vegetation loss	922	
New trees	-249	
Total	**244,379**	
AVAQMD Project-Level CEQA Significance Threshold	***100,000***	
Exceeds threshold?	Yes	
Service population (SP)	80,825	
GHG Efficiency	**3.02**	
SCAQMD Plan-Level Staff-Proposed GHG Efficiency Threshold ($MTCO_2e$/SP/Year)	***4.1***	
Exceeds threshold?	No	
SCAQMD Project-Level Staff-Proposed GHG Efficiency Threshold ($MTCO_2e$/SP/Year)	***3.0***	
Exceeds threshold?	Yes	

GHG: greenhouse gas; $MTCO_2e$/yr: Metric tons of carbon dioxide equivalent per year; AVAQMD: Antelope Valley Air Quality Management District; CEQA: California Environmental Quality Act; SCAQMD: South Coast Air Quality Management District.

Emissions calculations can be found in Appendix 5.11-A.

Annotation 2:

Updated GHG Report Table 1(below), compares the DEIR Quantified GHG Emissions (as shown in DEIR Table 5.21-1, above) with the results of the Updated GHG Calculations described in the Updated GHG Report. As explained in the Updated GHG Report, total Project emissions in the Updated GHG Calculations are 157,642 metric tons of carbon dioxide equivalent per year ($MTCO_2e$/yr), a reduction of -86,736 $MTCO_2e$/yr (approximately 35 percent) from the DEIR Quantified GHG Emissions of 244,370 $MTCO_2e$/yr.[1]

UPDATED GHG REPORT TABLE 1
DEIR QUANTIFIED GHG EMISSIONS AND UPDATED GHG CALCULATIONS
($MTCO_2E$/YEAR)

GHG Emission Sources	DEIR Quantified GHG Emissions	Reductions		Net Change in GHG Emissions	Updated GHG Calculations
		From Regulations and CalEEMod Update	*From Mitigation Measures*		
Mobile	160,904	-52,694[a]	-31,203[b]	-83,897	77,007
Energy	49,414	5,584	50	5,634	55,047
Electrical Power	*23,276*	*5,806*[c]	*50*[d]	*5,856*	*29,132*
Natural Gas	*26,137*	*-222*	*0*	*-222*	*25,915*
Water and Wastewater	7,387	0	-3,184[e]	-3,184	4,203
Solid Waste	10,214	-5,107[f]	0	-5,107	5,107
Area	11,297	0	-74[g]	-74	11,223
Construction	4,490	0	0	0	4,490
Vegetation	673	-108[h]	0	-108	565
Total Emissions	**244,379**	**-52,324**	**-34,412**	**-86,736**	**157,642**

Sources: DEIR Quantified GHG Emissions from DEIR Section 5.21; Updated GHG Calculations from Psomas using CalEEMod version 16.3.2 (June 2018).

a Reductions assume that 80 percent of the GHG emissions reductions attributable to the utilization of EVs at Project buildout are due to regulatory, CalEEMod and EV market development factors (see "Mobile Emissions" discussion below).

b Reductions attributable to MM 10-1, MM 10-25, MM 10-26, MM 21-14, MM 21-22, and MM 14-11, as well as 20 percent of the reductions attributable to the utilization of EVs at Project buildout (see "Mobile Emissions" discussion below).

c Overall increases attributable to combination of EV charging infrastructure emissions (increase of 11,224 $MTCO_2e$/yr allocated at 80 percent per footnote "a" above, and due to MM 11-4, MM 11-6, MM 21-15, MM 21-16, MM 21-18 and MM 21-19). GHG decreased emissions are also included, due to 2019 Title 24 Standards (reductions of -3,173 $MTCO_2e$/yr).

d Overall increases attributable to combination of EV charging infrastructure emissions (increase of 11,224 $MTCO_2e$/yr allocated at 20 percent per footnote "b" above), and due to MMs 13-2 and 13-6 (reduction of -109 $MTCO_2e$/yr) and MM 21-1 (-2,086 $MTCO_2e$/yr).

e Reductions attributable to MM 18-1, MM 21-9, and MM 21-13.

f Reductions attributable to MM 17-10 and attributed to regulatory factors.

g Reductions attributable to MM 11-3 and electric landscape equipment (Green Development Program).

h Reductions attributable to MM 7-11, MM 7-12 and MM 21-20 and attributed to regulatory factors.

Note: Total emissions may not add up exactly due to rounding.

As discussed in more detail in Updated GHG Report Section 2.2, *Energy*, due to the combination of quantified EV charging demand, which increases Project electricity use, and reductions in electricity use associated with the new 2019 Title 24 Building Energy Efficiency

Standards, which decreases Project electricity use, the Updated GHG Calculations include an overall increase GHG emissions from the use of electrical power when compared to the DEIR Quantified GHG Emissions. However, as discussed in Updated GHG Report Section 2.1, *Mobile Emissions*, a higher rate of EV adoption reduces mobile source GHG emissions by -83,897 $MTCO_2e$/yr from the DEIR Quantified GHG Emissions.

Cap and Trade Reductions

As further explained in Section 3.0 and Table 3 of the Updated GHG Report, approximately 96 percent (150,808 $MTCO_2e$/yr) of the Updated GHG Calculations emissions are covered by, and subject to, the purchase of emission allowances under the new, expanded state Cap and Trade program approved by the Legislature after the DEIR was issued, and signed into law in 2017 (Assembly Bill 398 [AB 398]). The Cap and Trade program was designed to comprehensively regulate fossil fuels (from "wells to wheels" – from production, through refining, through ultimate consumption).

Compliance with the Cap and Trade program was upheld as a lawful CEQA mitigation measure to reduce GHG emissions to a less-than-significant-level for fossil fuels used by a refinery project for both direct refinery operations as well as indirect electricity consumption-related GHG emissions in a recent CEQA appellate court case, *Association of Irritated Residents v. Kern County Board of Supervisors, et al. (Alon USA Energy, Inc., et al., Real Parties in Interest)* (2017) 17 Cal.App.5th 708 ("*Alon*").[2] The California Supreme Court declined to reverse, or de-publish, this case. The California Air Resources Board (CARB) has also determined that existing California law provides sufficient authority to extend the Cap and Trade program as required to meet state GHG reduction objectives, as explained in the Updated GHG Report.

Updated GHG Report Table 3, below, shows that approximately 96 percent, or 150,808 $MTCO_2e$/yr of the total Updated GHG Calculations emissions are covered by the Cap and Trade program. Only approximately 4 percent of the total emissions, or 6,834 $MTCO_2e$/yr, largely from landfill waste and wastewater treatment process biogas reuse for energy production, would not be subject to the purchase of emission allowances under the Cap and Trade program.

UPDATED GHG REPORT TABLE 3
UPDATED GHG CALCULATIONS EMISSIONS SUBJECT TO CAP-AND-TRADE (MTCO2E/YEAR)

GHG Emission Sources	Updated GHG Calculations	Subject to Cap and Trade?	Amount Subject to Cap-and-Trade	Remaining Emissions After Cap-and-Trade
Area	11,223	Yes: natural gas for fireplaces and electricity for landscaping equipment	-11,223	0
Energy				
Electrical Power	29,132	Yes: emissions from generating electrical power	-29,132	0
Natural Gas	25,915	Yes: Natural gas used for building heating, cooking, etc.	-25,915	0
Mobile	77,007	Yes: transportation fuels	-77,007	0

Solid Waste	5,107	No: landfill decomposition emissions	0	5,107
Water and Wastewater				
Wastewater Electricity	277	Yes: emissions from generating electrical power	-277	0
Water Electricity	2,764	Yes: emissions from generating electrical power	-2,764	0
Bio-Gas	1,162	No: biogas recovered from treatment process	0	1,162
Construction	4,490	Yes: transportation fuels	-4,490	0
Vegetation				
Vegetation Loss	814	No	0	814
New Trees	-249	No	0	-249
Total	**157,642**		**-150,808**	**6,834**
Source: Updated GHG Calculations from Psomas using CalEEMod version 16.3.2 (June 2018)				

Net Zero Carbon For The Electric Sector

The Project's Development Agreement obligates the Project to achieve a "net zero carbon for the electric sector" standard on all public and private facilities constructed within the Project. Per the Development Agreement, "net zero carbon for the electric sector" means that carbon emissions created to produce electricity that is consumed within the Specific Plan area will be offset with an equivalent amount of carbon emission reductions that result from quantified greenhouse gas emission reductions. As further explained in Section 4.0 and Table 4 of the Updated GHG Report, GHG emissions from all Project electrical power consumption in the Updated GHG Calculations, including EV charging requirements, are 32,173 $MTCO_2e$/yr. These emissions are significantly less than the Updated GHG Calculation's net -86,736 $MTCO_2e$/yr reduction from the DEIR Quantified GHG Emissions. Even without consideration of GHG emissions reductions associated with regulations (see Updated GHG Report Table 1), the Project's MMs account for -34,412 $MTCO_2e$/yr of the net reduction in GHG emissions, which is greater than the emissions associated with Project's electricity usage. Therefore, the Project achieves the "net zero carbon from the electric sector" commitment included in the Project's Development Agreement by assuring that GHG emissions from Project electricity consumption are more than offset by mitigation-based GHG reductions, as shown in Updated GHG Report Table 4, below. As shown in Updated GHG Report Table 5, below, total Project GHG Emissions are 157,642 $MTCO_2e$/yr.

UPDATED GHG REPORT TABLE 4
ADDITIONAL REDUCTION ANALYSIS ELECTRICAL POWER EMISSIONS AND NET EMISSIONS REDUCTIONS FROM DEIR

GHG Emission Sources	Electrical Power GHG Emissions ($MTCO_2e$/yr)
Area	0
Energy	29,132
Electrical Power	*29,132*
Natural Gas	*0*
Mobile	0

Solid Waste	0
Water and Wastewater	
Water (Supply, Treatment, Distribution)	2,764
Wastewater Electricity	277
Construction	0
Vegetation	0
Total Electrical Power GHG Emissions	**32,173**
Updated GHG Calculations Electrical Power and Total GHG Emissions Summary	
Total Electrical Power GHG Emissions	**32,173**
Total Reduction from DEIR Quantified GHG Emissions (Mitigation Measures Only- See Updated GHG Report Table 1)	**-34,412**
GHG Emission Reductions Net of Electrical Power Emissions	**-2,239**
Sources: DEIR Quantified GHG Emissions from DEIR Section 5.21; Updated GHG Calculations from Psomas using CalEEMod version 16.3.2 (June 2018).	

Service Population GHG Efficiency

As explained in Section 5.0 and Table 5 of the Updated GHG Report, the Project's GHG Efficiency based on the estimated service population decreased from 3.02 as presented in the DEIR Quantified GHG Emissions to 1.93 as calculated in the Updated GHG Calculations. The CARB adopted the 2017 Climate Change Scoping Plan (see Annotation 3), which recommends statewide targets of no more than 6 $MTCO_2e$ per capita by 2030, and no more than 2 $MTCO_2e$ per capita by 2050. The Project's GHG Efficiency of 1.93 at Project buildout is below the Scoping Plan's 2030 and 2050 per capita targets, as shown in Updated GHG Report Table 5, below:

UPDATED GHG REPORT TABLE 5
UPDATED GHG CALCULATIONS
SERVICE POPULATION GHG EFFICIENCY

	Factors
Residents at Buildout	57,150
Non-Resident Employees	15,783
Non-Resident/Non-Employee Visitors	8,915
Service Population (SP)	**81,848**
Project GHG Emissions ($MTCO_2e$/yr)	**157,642**
GHG Efficiency ($MTCO_2e$/SP/yr)	**1.93**
Sources: DEIR Section 5.9, Population and Housing and Stantec.	

1. Updated GHG Report at 3.
2. *See also, Association of Irritated Residents v. Kern County Board of Supervisors* (2017) 17 Cal.App.5th 708 (17 Cal.Rptr.3d 463) (Appellants' Opening Brief, 2016 WL 733999 (filed 12/ 9/2016); Joint Respondents' Brief, 2017 WL 977138 (filed 3/10/2017); Appellants' Reply Brief, 2017 WL 2398823 (filed 5/26/2017); *see also*, *California Building Industry Assn. v. Bay Area Air Quality Management District* (2013) 218 Cal.App.4th 1171 (161 Cal.Rptr.3d 128) (Appellant's Opening Brief, 212 WL 6552886 (filed 11/15/2012); Respondent's Brief, 2013 WL 359687 (filed 01/18/2013); Appellant's Reply Brief, 2013 WL 1177301 (filed 02/19/2013); *see also*, CARB. October 2011. California's Cap-And-Trade Program Final Statement of Reasons, p. 2: https://www.arb.ca.gov/regact/2010/capandtrade10/fsor.pdf (incorporating by reference CARB. October 28, 2010. Staff Report: *Initial Statement of Reasons for the Proposed Regulation to Implement the California Cap-and-Trade Program Part 1, Vol. 1,* pp. II-10, II-20, II-21, 11-53: https://www.arb.ca.gov/regact/2010/capandtrade10/capisor.pdf).

As discussed further in Section 5.21.2, in 2016 the California Supreme Court reviewed a quantitative GHG significance threshold (29% below "Business as Usual") in a CEQA lawsuit challenging the Newhall master planned community project, and determined that the state agency respondent's reliance on this quantitative GHG threshold was not appropriate because it was a statewide GHG reduction threshold, and the record lacked substantial evidence in support of the use of this threshold for the particular land use project at issue in that lawsuit. The AVAQMD GHG threshold was adopted, and the SCAQMD GHG threshold was proposed by staff but never adopted, prior to this Supreme Court decision; neither of these agencies included substantial evidence in the public record justifying the use of their respective quantitative thresholds for particular types of projects. However, for informational purposes, Table 5.21-1 also shows that Project GHG emissions would exceed the AVAQMD 100,000 $MTCO_2e$ per year project-level threshold. The Project's service population is estimated at 57,150 residents and 23,675 employees for a total of 80,825 at Project buildout. Also, for informational purposes, Table 5.21-1 shows that the Project's GHG efficiency would be 3.02, which would not exceed the SCAQMD-staff-proposed "plan-level" 4.1 GHG efficiency threshold, but would exceed the SCAQMD-staff-proposed "project-level" 3.0 GHG efficiency threshold.

The Project would be consistent with the CCAP, the SCAG 2012–2035 and 2016–2040 RTP/SCS, and regulatory measures designed to reduce GHG emissions. Additionally, the Project is consistent with the SCAQMD's staff's proposed draft efficiency threshold for the AVAP.

As discussed in detail in Section 5.21.6, based on the Project's consistency with the CCAP, the SCAG 2012–2035 and 2016–2040 RTP/SCS, and based on its compliance with applicable GHG-reducing regulatory measures, the Project could be found to have a less than significant impact on GHG. However, climate change is a global phenomenon and the significance of GHG emissions is most appropriately considered on a cumulative level. The Project would emit GHGs at an estimated rate of 244,379 metric tons per year and would contribute to the global inventory of GHGs.

To date, the vast majority of other States and nations have not followed California's lead in mandating GHG emission reductions across a broad spectrum of economic sectors and have not enacted regulations similar to those adopted in California, which already has nearly the lowest level of GHG per capita of any state. The County of Los Angeles has no jurisdictional control or responsibility for GHG reductions in other parts of California, and certainly not in the context of global action. Moreover, due to the County's limited jurisdiction over many GHG reduction measures required in both the CCAP and the RTP/SCS, and with respect to the many GHG-reducing regulatory programs implemented at the State level, the County lacks the requisite level of jurisdiction and control to ensure that all such measures and programs will be fully implemented as planned by third party agencies and private parties. Therefore, because of the global context of GHG emissions which are outside the County's jurisdiction and control, and because the of Project's forecasted GHG emission rate, the project's incremental contribution to the cumulative environmental impact related to GHG emissions is conservatively determined to be cumulatively considerable and this significant cumulative impact would be significant and unavoidable.

All reasonable and feasible measures to maximize project GHG emissions reduction to the greatest extent feasible are described in Section 5.21.7.

Section Format

This section of environmental analysis includes a description of the state of the science of climate change; a discussion of the regulatory setting; a description of the related PDFs incorporated into the Project to minimize Project impacts; identification of thresholds of significance (or lack thereof); the GHG inventory; and analysis of the Project's potential individual and cumulative effects and identification of significant impacts:

- Introduction
    - Purpose
    - Summary
    - Section Format
    - Global Climate Change
- Relevant Plans, Policies, and Regulations
- Environmental Setting
- Project Design Features
- Threshold Criteria
- Environmental Impacts—A separate analysis is provided for each of the following categories of potential impacts:
    - On-Site Impacts
    - Off-Site Impacts
- Mitigation Measures
- Level of Significance After Mitigation
- References

Global Climate Change

Global climate change is a broad term used to describe any worldwide, long-term change in the Earth's climate. Global climate change refers to an increase in temperatures across the Earth due to human and industrial activity. Climate change, in addition to rising temperatures, can cause other climatic changes, such as a shift in the frequency and intensity of weather events such as rainfall or hurricanes, but it does not necessarily imply that all locations will be warmer. In fact, with global climate change, some locations will have climate patterns that may change in a way that makes the locations colder than average temperatures.

Climate change is a recorded change in the Earth's average weather measured by variables such as wind patterns, storms, precipitation, and temperature. Historical records show that global temperature changes have occurred naturally in the past, such as during previous ice ages. The year 2014 ranks as Earth's warmest year since 1880, and the 10 warmest years in the instrumental record, with the exception of 1998, have now occurred since 2000. The

average global temperature has risen about 1.4 degrees Fahrenheit (°F) (0.8 degrees Celsius [°C]) since 1880 (NASA 2015).

The global atmospheric concentration of carbon dioxide (CO_2), the most abundant GHG, has increased from a pre-industrial (roughly 1750) value of about 280 parts per million (ppm) to a seasonally-adjusted 405.75 ppm in February 2017, primarily due to fossil fuel use, with land use change providing a significant but smaller contribution. The annual CO_2 concentration growth rate during the ten-year period between 1995 and 2005 was larger than the growth rate from the beginning of continuous direct measurements in 1960 to 2005 (ESRL 2017).

Greenhouse Gases

GHGs, as defined by the United States Environmental Protection Agency (USEPA) and California Air Resources Board (CARB), include CO_2, methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). GHGs are global pollutants and are therefore unlike criteria air pollutants such as ozone (O_3), particulate matter (respirable particulate matter with a diameter of 10 microns or less [PM10] and fine particulate matter with a diameter of 2.5 microns or less [PM2.5]), and toxic air contaminants (TACs), which are pollutants of regional and local concern (see Section 5.11, Air Resources, of this EIR). While pollutants with localized air quality effects have relatively short atmospheric lifetimes (generally on the order of a few days), GHGs have relatively long atmospheric lifetimes, ranging from one year to several thousand years. Long atmospheric lifetimes allow for GHGs to disperse around the globe. Therefore, GHG effects are global, as opposed to the local and/or regional air quality effects of criteria air pollutant and TAC emissions.

Global warming potential (GWP) is a term used to indicate, on a pound for pound basis, how much a gas will contribute to global warming relative to how much warming would be caused by the same mass of CO_2. As the baseline for measuring GWP, CO_2 is considered to have a GWP equal to one. CH_4 and N_2O are substantially more potent than CO_2 with GWPs of 25 and 298, respectively. (Prior values of 21 and 310 were from the Intergovernmental Panel on Climate Change [IPCC] second assessment report; CARB has adopted the current values from the IPCC's fourth assessment report.) Carbon dioxide equivalent (CO_2e) is a quantity that enables all GHG emissions to be considered as a group despite their varying GWP. The GWP of each GHG is multiplied by the quantity of that gas to produce CO_2e.

The Greenhouse Effect

In a greenhouse, sunlight enters through the glass panels, and the heat from the sunlight is then trapped inside the structure. The Earth's atmosphere acts like a greenhouse by allowing sunlight in, but traps some of the heat that reaches the Earth's surface. When solar radiation from the sun reaches the Earth, much of it penetrates the atmosphere and ultimately reaches the Earth's surface. This solar radiation is absorbed by the Earth's surface and is then re-emitted as heat in the form of infrared radiation. Whereas the GHGs in the atmosphere let

solar radiation through, GHGs trap infrared radiation, resulting in the overall warming of the Earth's surface.[3420] This phenomenon is referred to as the "greenhouse effect".

Concentrations of major greenhouse gases, such as CO_2, CH_4, N_2O, and water vapor (H_2O) have been naturally present for millennia at relatively stable levels in the atmosphere, and act to keep temperatures on Earth hospitable. Without these GHGs, the earth's temperature would be too cold for life to exist. With increased human industrial activity, concentrations of certain GHGs have grown dramatically. In the absence of major industrial human activity, natural processes maintain atmospheric GHG concentrations at relatively stable levels, which have allowed global temperatures to remain at constant levels over the last several centuries. As the concentrations of GHGs have increased as a result of human industrial activity, the amount of infrared radiation that is trapped has increased, thereby increasing the Earth's average temperature.

5.21.2 – Relevant Plans, Policies, and Regulations

Many legal requirements applicable to greenhouse gas and climate change continue to be expanded and modified. This subsection presents a summary of applicable international laws (national treaties followed by sub-national agreements), federal laws, regulations and other actions, state laws, regulations, and other actions, and then local (regional and County) laws, regulations and other actions. Many of these legal requirements emerged over time through a combination of executive or agency actions, court decisions, regulations, enacted statutes, and approved plans. This regulatory background discussion includes a broader range of legal authorities than is included in other topical sections; is focused on the most significant of these measures; and based on the continuing evolution of these requirements within each category, is generally organized chronologically from earliest to most recent.

International

International Treaties and Other Developments

The Kyoto Protocol is an international agreement linked to the United Nations Framework Convention on Climate Change. It was adopted in Kyoto, Japan, on December 11, 1997, and entered into force on February 16, 2005. The major feature of the Kyoto Protocol is that it sets binding targets for 37 industrialized countries and the European community for reducing GHG emissions. The targets amount to an average of five percent reduction against 1990 levels over the 2008–2012 five-year period. The major distinction between the Protocol and the Convention is that, while the Convention encouraged industrialized countries to stabilize GHG emissions, the Protocol commits them to do so. Recognizing that developed countries are principally responsible for the current high levels of GHG emissions in the atmosphere as a result of more than 150 years of industrial activity, the Protocol places a heavier burden on developed nations under the principle of "common but differentiated responsibilities" (UN 1997). The United States has not ratified the Kyoto Protocol. A

[3420] Infrared radiation has longer wavelengths than does solar radiation. GHGs reflect radiation with longer wavelengths. As a result, instead of escaping back into space, GHGs reflect much infrared radiation (i.e., heat) back to Earth.

$^2/_3$ majority vote in the Senate is required for approval. As long as the United States has not ratified the treaty, it is not subject to its terms and obligations.

Negotiations after Kyoto have continued in an attempt to address the period after the first "commitment period" of the Kyoto Protocol, concluded at the end of 2012. In Durban, South Africa, in 2011, parties to the protocol agreed in principle to negotiate a new comprehensive and legally binding climate agreement by 2015 and to enter it into force for all parties starting from 2020. However, significant divisions remain in determining the parameters of any such new protocol, including its enforcement mechanisms and the degree to which developing economies will begin to be subject to binding emissions targets.

The 21st session of the Conference of Parties (COP21) took place from November 30, 2015 to December 11, 2015, in Paris, France. The session included representatives from 196 parties to the United Nations Framework Convention on Climate Change. Outcomes from COP21 include, but are not limited to, limiting global temperature increase well below 2°C; establishing binding commitments by all parties to make Nationally Determined Contributions (NDC) and to pursue domestic policies aimed at achieving NDCs; and regular reporting by all countries on their emissions and progress made in implementing and achieving their NDCs (UN 2016). The continued commitment of the United States to the Paris Treaty was among the issues addressed in the 2016 Presidential election, with President Trump stating in some contexts his position that the United States should withdraw from the Paris treaty. No such withdrawal proposal has been made by the Trump administration, and a withdrawal request would trigger a multi-year process before taking effect. The timing, terms, and consequences of a full or partial withdrawal request remain speculative at this time.

Federal

Federal Action on Greenhouse Gas Emissions

In 2002, President George W. Bush set a national policy goal of reducing the GHG emission intensity (tons of GHG emissions per million dollars of gross domestic product) of the U.S. economy by 18 percent by 2012 (NOAA 2002). The goal did not establish any binding reductions. Rather, the USEPA administers a variety of voluntary programs and partnerships with GHG emitters in which the USEPA partners with industries that produce and utilize synthetic gases to reduce emissions of particularly potent GHGs.

April 2007 Supreme Court Ruling

In *Massachusetts et al. vs. Environmental Protection Agency et al.* (April 2, 2007), the U.S. Supreme Court ruled that the USEPA was authorized by the Clean Air Act to regulate CO_2 emissions from new motor vehicles. The Court did not mandate that the USEPA enact regulations to reduce GHG emissions, but found that the only instances in which the USEPA could avoid taking action were if it found that GHGs do not contribute to climate change or if it offered a "reasonable explanation" for not determining that GHGs contribute to climate change. On December 7, 2009, the USEPA issued an "endangerment finding" under the Clean Air Act, concluding that GHGs threaten the public health and welfare of current and future

generations and that motor vehicles contribute to GHG pollution (USEPA 2009a). These findings provide the basis for adopting new national regulations to mandate GHG emission reductions under the Federal Clean Air Act.

Light-Duty Vehicle Greenhouse Gas Emissions Standards and Corporate Average Fuel Economy Standards

The USEPA and the Department of Transportation's National Highway Traffic Safety Administration (NHTSA) have been working together on developing a National Program of regulations to reduce GHG emissions and to improve the fuel economy of light-duty vehicles. On April 1, 2010, the USEPA and NHTSA announced a joint Final Rulemaking establishing standards for 2012 through 2016 model year vehicles. On October 15, 2012, the agencies issued a Final Rulemaking with standards for model years 2017 through 2025. The rules require these vehicles to meet an estimated combined average emissions level of 295 grams of CO_2 per mile by 2012, decreasing to 250 grams per mile by 2016, and finally to an average industry fleet-wide level of 163 grams per mile in model year 2025. The 2016 standard is equivalent to 35.5 miles per gallon (mpg) and the 2025 standard is equivalent to 54.5 mpg if the levels were achieved solely through improvements in fuel efficiency. The agencies expect, however, that a portion of these improvements will occur due to air conditioning technology improvements (i.e., they will leak less) and due to the use of alternative refrigerants, which would not contribute to fuel economy. These standards would cut GHG emissions by an estimated 2 billion metric tons and 4 billion barrels of oil over the lifetime of the vehicles sold under the program (model years 2017–2025). The combined USEPA GHG standards and NHTSA Corporate Average Fuel Economy (CAFE) standards resolve previously conflicting requirements under both federal programs and the standards of the State of California and other States that have adopted the California standards (USEPA 2010b; USEPA and NHTSA 2012).

Heavy-Duty Engines and Vehicles Fuel Efficiency Standards

In addition to the regulations applicable to cars and light-duty trucks, on August 9, 2011, the USEPA and the NHTSA announced fuel economy and GHG standards for medium- and heavy-duty trucks, which applies to vehicles from model year 2014 to 2018 (USEPA 2011). USEPA and NHTSA have adopted standards for CO_2 emissions and fuel consumption, respectively, tailored to each of three main vehicle categories: combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles. According to the USEPA, this program will reduce GHG emissions and fuel consumption for affected vehicles between 9 percent to 23 percent.

Additional Federal GHG Rules and Policies

In addition to the rules and regulations developed with respect to stationary and mobile sources discussed above, various other federal developments have occurred that aim to reduce GHGs from other sources, including land use activities.

Energy Independence and Security Act

On December 19, 2007, the Energy Independence and Security Act of 2007 was signed into law (EISA). Among other key measures, the EISA would do the following, which would aid in the reduction of national mobile and non-mobile GHG emissions:

1. Increase the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard (RFS) requiring fuel producers to use at least 36 billion gallons of biofuel in 2022;
2. Prescribe or revise standards affecting regional efficiency for heating and cooling products, procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances; and
3. Set miles per gallon targets for cars and light trucks and directed the NHTSA to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for work trucks. (These were superseded by the NHTSA and USEPA actions discussed above.)

Additional provisions of the EISA address energy savings in government and public institutions, promoting research for alternative energy, additional research in carbon capture, international energy programs, and the creation of "green jobs".

American Recovery and Reinvestment Act

On February 17, 2009, President Obama signed the American Recovery and Reinvestment Act of 2009 (ARRA). ARRA was passed in response to the economic crisis of the late 2000s, with the primary purpose to maintain existing jobs and create new jobs. Among the secondary objectives of ARRA was investment in "green" energy programs, including funding the following through grants, loans, or other funding; private companies developing renewable energy technologies; local and State governments implementing energy efficiency and clean energy programs; research in renewable energy, biofuels, and carbon capture; and development of high efficiency or electric vehicles.

Council on Environmental Quality National Environmental Policy Act Guidelines on Greenhouse Gasses

On February 18, 2010, the White House Council on Environmental Quality (CEQ) published draft guidance on the consideration of greenhouse gases and climate change for National Environmental Policy Act (NEPA) analyses (CEQ 2010). On December 18, 2014 CEQ released the *Revised Draft Guidance on the Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in NEPA Reviews* (CEQ 2014). Both documents recommend that proposed federal actions that are reasonably expected to directly emit 25,000 million metric tons of carbon dioxide equivalent per year ($MMTCO_2e$/year) should prepare a quantitative and qualitative NEPA analysis of direct and indirect greenhouse gas emissions.

The draft guidance provides reporting tools and instructions on how to assess the effects of climate change. The draft guidance does not propose to regulate greenhouse gases. Although

CEQ has not yet issued final guidance, various NEPA documents are beginning to incorporate the approach recommended in the draft guidance.

Voluntary Programs

The USEPA administers a variety of voluntary programs and partnerships with GHG emitters in which the USEPA partners with industries that produce and utilize synthetic gases to reduce emissions of particularly potent GHGs. For example, the USEPA's National Clean Diesel Campaign (NCDC) promotes diesel emission reduction strategies. The NCDC works to reduce the pollution emitted from diesel engines across the country through the implementation of varied control strategies by working with manufacturers, fleet operators, air quality professionals, environmental and community organizations, and State and local officials to reduce diesel emissions. NCDC activities include: developing new emissions standards for locomotive and marine diesel engines; and promoting the reduction of emissions for existing diesel engines, including use of cleaner fuels, retrofitting and repairing existing fleets, idling reduction among others. The USEPA also administers the State and Local Climate and Energy Program that provides technical assistance, analytical tools, and outreach support to State, local, and tribal governments (USEPA 2017).

Greenhouse Gas and Climate Policies of the Trump Administration. President Trump and his senior advisors and appointees, including US Environmental Protection Agency Secretary Scott Pruitt, have stated their intent to halt various regulatory activities to reduce greenhouse gas emissions, including for example, the Climate Action Plan, the Clean Power Plan, and a waiver program allowing California to mandate more stringent emission standards for passenger cars and light duty trucks. Representatives from various states, including California's Governor and Legislative leaders, along with national environmental advocacy groups such as the Natural Resources Defense Council, have stated their intent to sue to block federal agency actions that would postpone or eliminate GHG reduction measures approved by former President Obama, and to consider expansions of state-level GHG reduction measures that are not dependent on federal action. The timing, emission consequences, litigation outcome, and implementation consequences of these types of federal GHG decisions, and the potential for and consequences of enhanced GHG reduction regulatory programs by other entities such as the state of California, remain speculative at this time.

Multi-State/Regional Area

Western Regional Climate Action Initiative

The Western Regional Climate Action Initiative (WCI) is a partnership among seven States, including California, and four Canadian provinces to implement a regional, economy-wide cap-and-trade system to reduce global warming pollution. The WCI will cap GHG emissions from the region's electricity, industrial, and transportation sectors with the goal to reduce the heat trapping emissions that cause global warming to 15 percent below 2005 levels by 2020. When the WCI adopted this goal in 2007, it estimated that this would require 2007 levels to be reduced worldwide between 50 and 85 percent by 2050. California is working closely with the other States and provinces to design a regional GHG reduction program that

includes a cap-and-trade approach. CARB's planned cap and-trade program, discussed below, is also intended to link California and the other member States and provinces. As of January 1, 2014, California's Cap-and-Trade program is linked to Quebec's pursuant to the Agreement Between the California Air Resources Board and the Gouvernement du Québec Concerning the Harmonization and Integration of Cap-and-Trade Programs Reducing Greenhouse Gas Emissions, in accordance with the direction in CARB Board Resolution 13-7 (CARB 2013).

Pacific Coast Action Plan on Climate and Energy

On October 28, 2013, the Governors of California, Oregon, and Washington and the Premier of British Columbia signed a clean energy pact, known as the Pacific Coast Action Plan on Climate and Energy (Pacific Coast Action Plan). Although the Action Plan does not impose legally enforceable obligations and lacks a specific schedule for implementation, the pact sets out a number of goals and aspirational measures. The Action Plan calls upon each of the parties to undertake a number of measures to address the use of carbon-based fuels in the transportation sector, including the adoption or maintenance of low-carbon fuel standards; the development of targets and action plans in order to encourage public and private investment in low-carbon commercial fleets that use alternative fields; and the expansion of the sale of zero-emissions vehicles to a goal of ten percent of new vehicle purchases by 2016 (Pacific Coast Collaborative 2013).

State

California has enacted a variety of legislation relating to climate change, much of which sets aggressive goals for GHG emissions reductions within the state. However, none of this legislation provides definitive direction regarding the treatment of climate change in environmental review documents prepared under CEQA. In particular, the amendments to the State CEQA Guidelines do not require or suggest specific methodologies for performing an assessment or thresholds of significance, and do not specify greenhouse gas reduction mitigation measures. Instead, the CEQA amendments continue to rely on lead agencies to choose methodologies and make significance determinations based on substantial evidence, as discussed in further detail below (CNRA 2009b). Consequently, no State agency has promulgated binding regulations for analyzing GHG emissions, determining their significance, or mitigating any significant effects in CEQA documents. The discussion below provides a brief overview of the Governor's, CARB and California Office of Planning and Research (OPR) policies, of court decisions, and of the legislation that relates to climate change that may affect the emissions associated with the proposed Project.

California Supreme Court Ruling in Center for Biological Diversity v. Department of Fish and Wildlife

In its recent decision, *Center for Biological Diversity v. Department of Fish and Wildlife,* S217763 (*Newhall*), the Court evaluated the California Department of Fish and Wildlife's (CDFW) analysis of potential impacts caused by GHG emissions contained in the EIR for the proposed land development called Newhall Ranch (California 2015a). In the EIR, the CDFW

analyzed GHG emissions under Assembly Bill (AB) 32, using the business-as-usual (BAU) comparison as its sole criterion of significance.

In *Newhall*, the California Supreme Court concluded that a finding of consistency with meeting statewide emission reduction goals is a legally permissible criterion of significance when analyzing potential impacts of GHG emissions under CEQA. However, the Court found that the EIR's conclusion that the project's emissions would be less than significant under that criterion was not supported by substantial evidence, and remanded back to the appellate court the narrow issue of whether substantial evidence supported the application of AB 32 statewide GHG reduction goal of 29 percent to new land use projects.

The Court then identified "potential options" for lead agencies evaluating cumulative significance of a proposed land use development's GHG emissions in future CEQA documents, but the Court was careful to note that there was no "guarantee" that any of these would be sufficient:

> We do not, of course, guarantee that any of these approaches will be found to satisfy CEQA's demands as to any particular project; what follows is merely a description of potential pathways to compliance, depending on the circumstances of a given project.

The "potential pathways to compliance" suggested by the Court are as follows:

1. **Business As Usual (BAU) Model:** While the Court cautioned that the Scoping Plan may not be appropriate at the project-level, the BAU model might be used to determine what level of reduction from business as usual a new land use development at the proposed location must contribute in order to comply with statewide goals pursuant to AB 32. The Court specifically directed that reliance on this type of quantitative threshold must be supported by substantial evidence in the record that links the statewide GHG reduction standard to the appropriate GHG reduction standard for the specific type of project under consideration.
2. **Compliance With Regulatory Programs Designed To Reduce Greenhouse Gas Emissions:** The Court suggests that a lead agency could rely on a showing of compliance with regulatory programs designed to reduce greenhouse gas emissions in order to demonstrate consistency with AB 32's goals. The Court clarifies that a significance analysis based on compliance with such statewide regulations only goes to impacts within the area governed by the regulations.
3. **Local Climate Action Plan Or Other "Geographically Specific Greenhouse Gas Emission Reduction Plans":** The Court points out that these plans may provide a basis for the tiering or streamlining of project-level CEQA analysis, so long as the plan is "sufficiently detailed and adequately supported."

4. **Regional Sustainable Community Strategy (SCS):** The Court also articulates that a lead agency need not additionally analyze greenhouse gas emissions from cars and light trucks in CEQA documents for certain residential, mixed use and transit priority projects that are consistent with an applicable SCS adopted pursuant to SB [Senate Bill] 375.
5. **Numerical GHG Significance Thresholds:** Although noting that use of such thresholds are not required, the Court favorably cited to the BAAQMD GHG significance thresholds, based on compliance with AB 32, which use a "service population" GHG ratio threshold for land use projects and a 10,000 ton annual GHG emission threshold for industrial projects. The Court remanded for further consideration the application of the 29 percent overall Scoping Plan metric, which is used by several Air Districts and, like the favorably-cited BAAQMD [Bay Area Air Quality Management District] metric, is based on AB 32.
6. **Executive Order Nos. S-3-05 and B-30-15:** Citing to Executive Order Nos. S-3-05 and B-30-15, the Court cautioned that those EIRs taking a goal-consistency approach to CEQA significance may "in the near future" need to consider the project's effects on meeting emissions reduction targets beyond 2020.

Following the Supreme Court's decision in *Newhall*, the EIR at issue in that case was set aside on remand by the lower court. On November 2016, the CDFW released a draft Additional Environmental Analysis (AEA) intended to address the agency's CEQA compliance obligations (CDFW 2016). The AEA does not respond to the Supreme Court's direction to provide substantial evidence supporting the 29% BAU statutory GHG reduction threshold relied upon by the *Newhall* EIR. The AEA also does not include an assessment of the *Newhall* project's consistency with any of the Court's suggested GHG CEQA compliance pathways, although referenced documentation in the *Newhall* administrative record do include and confirm compliance with each pathway. Instead, as described in the AEA, the *Newhall* project applicant (Five Point LLC) voluntarily modified its project and proposed to achieve "net zero" GHG emissions for the project with the implementation of the project applicant's "zero net emission" proposal, which was made enforceable by the addition of 13 mitigation measures that correspond to the applicant's proposal, as further described in the AEA. The AEA states that the adoption and implementation of the 13 mitigation measures would reduce mobile source, electricity, natural gas, vegetation removal, and construction-related emissions by the amount of emissions estimated for the project and result in no net contributions of GHG emissions from the project, or "zero net emissions." The AEA further concludes that because the project would result in no net increase of GHG emissions after implementation of the mitigation measures, there would be no contribution of GHG emissions to cumulative GHG emissions influencing global climate change and the *Newhall* project would not conflict with any plan, policy, or regulation adopted for the purpose of reducing the emission of GHGs. Consequently, the AEA concludes that project GHG and climate change impacts would be less than significant. (CDFW 2016, pp. 1-18).

Executive Order S-3-05 (Statewide GHG Targets)

On June 1, 2005, Governor Arnold Schwarzenegger signed Executive Order S-3-05, which proclaims that California is vulnerable to the impacts of climate change. It declares that increased temperatures could reduce snowpack in the Sierra Nevada Mountains; could further exacerbate California's air quality problems; and could potentially cause a rise in sea levels. In an effort to avoid or reduce the impacts of climate change, Executive Order S-3-05 calls for a reduction in GHG emissions to the year 2000 level by 2010, to year 1990 levels by 2020, and to 80 percent below 1990 levels by 2050.

Executive orders do not have the same status as a law because in California's constitutional system, it is the Legislature, not the Governor, who is entrusted with the role of making statewide laws (California 1997 [p. 836], 1990). The Legislature declined to include the Executive Order's 2050 goal in AB 32 (discussed below), and again declined to use the EO's 2050 goal in adopting Senate Bill (SB) 375 (discussed below), nor has it incorporated it in any implementing legislation or applicable plans. Additionally, although CARB has the requisite authority to adopt whatever regulations are necessary beyond the AB 32 horizon year 2020 to meet the target set forth in S-3-05, the agency has not done so. Since the Legislature has never enacted EO S-3-05's 2050 target, and no expert agency has interpreted CEQA to require it, the 2050 target has only the force and effect of an executive order issued by a former Governor. There is no authority that suggests that the constitutional authority to establish CEQA significance thresholds resides in the Governor. CEQA is a statute, and the authority to amend and revise its requirements falls first to the Legislature. The Legislature alone has the authority to enact, amend, or revise legislation, absent some express delegation of authority to the Governor or an executive branch agency through statutory enactments (California 2010 [p. 1015]). If the Legislature has delegated any of its authority to define CEQA's requirements, it delegated that authority to OPR and not to the Governor's office.

Moreover, CARB's Scoping Plan to implement AB 32 looked beyond 2020 to assess whether implementing the Scoping Plan would achieve the State's long-term climate goals and determined that it would do the following (CARB 2008a [p. 117]):

Climate scientists tell us that the 2050 target represents the level of greenhouse gas emissions that advanced economies must reach if the climate is to be stabilized in the latter half of the 21st century. Full implementation of the Scoping Plan will put California on a path toward these required long-term reductions. Just as importantly, it will put into place many of the measures needed to keep us on that path.

The 2014 Scoping Plan Update confirms that "California is on track to meet the near-term 2020 greenhouse gas limit and is well positioned to maintain and continue reductions beyond 2020 as required by AB 32" and it recognizes the potential for California to "reduce emissions by 2030 to levels squarely in line with those needed in the developed world and to stay on track to reduce emissions to 80 percent below 1990 levels by 2050" (CARB 2014b, p. 2).

However, the 2014 Scoping Plan Update also concludes that additional actions will be needed to continue reducing emissions and meet the 2050 goals in the face of anticipated

population and economic growth (CARB 2014b). In fact, significant technological innovation, well beyond the scope of an individual development project, are absolutely necessary components of any plausible path to achieving the EO S-3-05's 2050 target. For example, CARB has concluded that "California must transition to zero and near-zero emission transportation and freight movement technologies" which require expedited completing of "promising new heavy-duty vehicle technologies," and to "encourage additional needed technology innovation" CARB proposes to amend some of its regulatory requirements. [https://www.arb.ca.gov/msprog/itr/itr.htm] Similarly, in one of several reports CARB's Advanced Technology to Meet California's Climate Goals: Opportunities, Barriers & Policy Solutions (CARB, 2009) concludes that "(m)eeting California's long-term GHG goals will require the development and deployment of low and zero GHG advanced technologies in addition to the accelerated diffusion of currently available technologies."

These new technology innovations to change transportation engine and fuel technology, and energy generation and storage technology are generally outside the jurisdiction and control of the local government agency such as the County. Achieving these goals will require wholesale shifts in fuel and energy technology, neither of which are currently available, rendering any further analysis of a given development project's impacts relative to the 2050 target too speculative for purposes of determining CEQA significance.

The Court in the ***Newhall*** decision noted that an analysis of goals beyond 2020 may be necessary for new development; however, Court noted that the target set by EO S-3-05 and the interim goal set in EO B-30-15 (discussed below) were not required significance criteria in analyzing impacts related to GHG emissions and climate change under CEQA for the abovementioned reasons.

Executive Order B-30-15 (Statewide Interim GHG Targets)

California EO B-30-15 (April 29, 2015) set an "interim" statewide emission target to reduce GHG emissions to 40 percent below 1990 levels by 2030, and directed State agencies with jurisdiction over greenhouse gas emissions to implement measures pursuant to statutory authority to achieve this 2030 target and the 2050 target of 80 percent below 1990 levels. Specifically, the Executive Order directed CARB to update the Scoping Plan to express this 2030 target in metric tons. This new Executive Order is subject to all the same limitations as discussed above for EO S-03-05. However, EO B-30-15 is more specific in its direction to State agencies so it remains to be seen how it will be implemented, and like EO S-3-05, neither CARB nor the legislature have incorporated the target set forth in B-30-15 in any implementing legislation or applicable plans. However, SB 350 was signed into law and (discussed below) it requires the state to double energy efficiency savings in electricity and natural gas by retail customers by 2030 and raises the Renewable Portfolio Standard (RPS) so that half of the state's electricity must be procured from renewable sources by 2030.

Assembly Bill 32 (Statewide GHG Reductions)

The California Global Warming Solutions Act of 2006 (AB 32) was signed into law in September 2006 after considerable study and expert testimony before the Legislature (California 2006a). The law instructs CARB to develop and enforce regulations for the

reporting and verifying of statewide GHG emissions. The Act directed CARB to set a GHG emission limit based on 1990 levels, to be achieved by 2020. The bill set a timeline for adopting a scoping plan for achieving GHG reductions in a technologically and economically feasible manner.

The heart of the bill is the requirement that statewide GHG emissions be reduced to 1990 levels by 2020. Based on CARB's calculation of 1990 baseline emissions levels, California must reduce GHG emissions by approximately 28.5 percent below "business-as-usual" predictions of year 2020 GHG emissions to achieve this goal. The bill requires CARB to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective GHG reductions. Key AB 32 milestones for CARB's actions include the following:

- **June 30, 2007.** Identification of discrete early action GHG emissions reduction measures. On June 21, 2007, CARB satisfied this requirement by approving three early action measures (CARB 2007a). These were later supplemented by adding six other discrete early action measures (CARB 2007b).
- **January 1, 2008.** Identification of the 1990 baseline GHG emissions level; approval of a statewide limit equivalent to that level; and adoption of reporting and verification requirements concerning GHG emissions. On December 6, 2007, CARB approved a statewide limit on GHG emissions levels for the year 2020 consistent with the determined 1990 baseline (CARB 2007c).
- **January 1, 2009.** Adoption of the Scoping Plan for achieving GHG emission reductions. On December 11, 2008, CARB adopted *Climate Change Scoping Plan: A Framework for Change* (Scoping Plan), discussed in more detail below (CARB 2008a).
- **January 1, 2010.** Adoption and enforcement of regulations to implement the "discrete" actions. Several early action measures have been adopted and became effective on January 1, 2010 (CARB 2007a, 2007b).
- **January 1, 2011.** Adoption of GHG emissions limits and reduction measures by regulation. On October 28, 2010, CARB released its proposed cap-and-trade regulations, which would cover sources of approximately 85 percent of California's GHG emissions. On October 20, 2011, the Board adopted the final cap-and-trade regulation. The final rulemaking packing was approved by the Office of Administrative Law (OAL) on December, 14 2011, with an effective date of January 1, 2012 (CARB 2011a).
- **January 1, 2015.** Cap-and-trade compliance obligations were phased in for suppliers of natural gas, reformulated gasoline blendstock for oxygenate blending (RBOB), distillate fuel oils, and liquefied petroleum gas, with emissions that meet or exceed specified emissions thresholds. Emission offsets are allowed for up to eight percent of a facility's compliance obligation. According to the 2016 California Climate Investments Annual Report, $2.6 billion from the Greenhouse Gas Reduction Fund has been appropriated to State agencies, and $1.7 billion has been awarded to projects (CARB 2016a). CARB has confirmed that the Cap-and-Trade program will continue to be administered after 2020.

As noted above, on December 11, 2008, CARB adopted the Scoping Plan to achieve the goals of AB 32. The Scoping Plan establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions. CARB determined that achieving the 1990 emission level would require a reduction of GHG emissions of approximately 28.5 percent below what would otherwise occur in 2020 in the absence of new laws and regulations (referred to as "business as usual"). The Scoping Plan evaluates opportunities for sector-specific reductions; integrates all CARB and Climate Action Team early actions and additional GHG reduction measures by both entities; identifies additional measures to be pursued as regulations; and outlines the role of a cap-and-trade program. The key elements of the Scoping Plan (CARB 2008a) include:

- Expanding and strengthening existing energy efficiency programs as well as building and appliance standards;
- Achieving a statewide renewables energy mix of 33 percent;
- Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system and caps sources contributing 85 percent of California's GHG emissions;
- Establishing targets for transportation-related GHG emissions for regions throughout California, and pursuing policies and incentives to achieve those targets;
- Adopting and implementing measures pursuant to existing State laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard; and
- Creating targeted fees, including a public goods charge on water use, fees on high global warming potential gases, and a fee to fund the administrative costs of the State of California's long-term commitment to AB 32 implementation.

In 2009, a coalition of environmental groups brought a challenge to the Scoping Plan alleging that it violated AB 32 and that the environmental review document (called a "Functional Equivalent Document" [FED]) violated CEQA by failing to appropriately analyze alternatives to the proposed cap-and-trade program. On May 20, 2011, the San Francisco Superior Court entered a final judgment in favor of the coalition and ordered that CARB take no further action with respect to cap-and-trade rulemaking until it complies with CEQA by properly analyzing alternatives in its FED to cap and trade (California 2011). CARB appealed the decision on May 23, 2011 (CARB 2011b). The Appellate Court stayed the Superior Court's injunction on June 3, 2011. The portions of the Scoping Plan that do not relate to cap and trade remain valid under the Court's judgment. On June 19, 2012, the California First District Court of Appeal upheld the Scoping Plan and affirmed CARB's approval of the Scoping Plan as in compliance with AB 32.

In connection with preparation of the supplement to the Functional Equivalent Document, CARB released revised estimates of the expected 2020 emission reductions in consideration of the economic recession and the availability of updated information from development of measure-specific regulations. Consideration of the economic recession and the effectiveness of adopted regulation reduced the projected 2020 BAU emissions from 596 $MMTCO_2e$ to 545

$MMTCO_2e$ (CARB 2011c). With the revised 2020 BAU projection, achieving the 1990 emissions level would require a reduction of GHG emissions of 118 $MMTCO_2e$, or 21.7 percent (down from 28.5 percent), to achieve in 2020 emissions levels in the BAU condition. CARB also updated its BAU evaluation to account for new laws and regulations mandating GHG reductions that had been implemented subsequent to the original Scoping Plan, such as the cleaner car mandates required by Pavley (vehicle model-years 2009–2016) and the renewable portfolio standard (12 percent–20 percent). Inclusion of these new GHG mandates further reduced the 2020 projected estimate of GHG emissions to 507 $MMTCO_2e$. As a result, based on both the economic recession and new GHG reduction implementation mandates, CARB determined in 2011 that achieving the 1990 emission level (and 2020 emissions limit of 427 $MMTCO_2e$) would require a reduction of GHG emissions of 80 $MMTCO_2e$, or a reduction by approximately 15.8 percent (down from 28.5 percent, but not directly comparable because of the change in methodology) to achieve in 2020 emissions levels in the "business as usual" or NAT condition (CARB 2011d).

CARB approved the final "First Update to the Climate Change Scoping Plan" on May 22, 2014. The first update describes California's progress towards AB 32 goals, stating that "California is on track to meet the near-term 2020 greenhouse gas limit and is well positioned to maintain and continue reductions beyond 2020 as required by AB 32". Specifically, "if California realizes the expected benefits of existing policy goals (such as 12,000 megawatts [MW] of renewable distributed generation by 2020, net zero energy homes after 2020, existing building retrofits under AB 758, and others) it could reduce emissions by 2030 to levels squarely in line with those needed in the developed world and to stay on track to reduce emissions to 80 percent below 1990 levels by 2050" (CARB 2014b). This first update retains from the October 2013 draft the recalculated 1990 GHG emissions level of 431 $MMTCO_2e$, as well as the 509 $MMTCO_2e$ 2020 "business as usual" or NAT condition (CARB 2014b). Thus, under CARB's most current document, reducing the "business as usual" or NAT condition of 509 $MMTCO_2e$ to the 1990 emissions level of 431 $MMTCO_2e$ will require a reduction of 78 $MMTCO_2e$, or approximately a 15.3 percent reduction (compared to a 28.5 percent reduction as set forth in the original Scoping Plan but not directly comparable because of the change in methodology).

CARB is moving forward with a second update to the Scoping Plan to reflect the 2030 target established in Executive Order B-30-15 (CARB 2015a) and in Senate Bill 32 (discussed below).

On January 20, 2017, CARB completed a draft 2030 Target Scoping Plan Update for which an extended public comment process is scheduled for completion in April 2016 (CARB 2016b). CARB estimates that adoption of the final 2030 Target Scoping Plan Update will be considered for approval by the CARB board at a public hearing conducted in Summer 2017. The 2030 Target Scoping Plan Update includes the new statutory GHG reduction requirements that were not included in the current Scoping Plan, including for example Senate Bill 32 (discussed below) which sets a 40% GHG reduction target below 1990 GHG levels to be achieved by 2030, SB 350 (which sets a 50% reduction in GHG emissions from electricity generation and other energy uses in existing structures, and a 50% renewable energy portfolio requirement), and SB 650 (which establishes priority GHG reduction targets

for designated types of greenhouse gases such as methane). The key elements of the draft Scoping Plan proposal call for further GHG reductions from the refinery sector specifically, further reductions from other stationary sources through either a renewed and expanded cap and trade or carbon tax program, further reductions from other sectors such as transportation technologies and services, water and solid waste conservation and management, and land uses in both open space and urban areas. The additional state statutory requirements addressed by the draft 2030 Target Scoping Plan Update are described below. Ongoing statutory proposals (e.g., to increase the renewable portfolio standard to 100% instead of 50%, and to adopt and expand cap and trade as a tax rather than fee program), and uncertainties regarding the greenhouse gas reductions requiring federal concurrence or support, may result in modifications to the 2030 Target Scoping Plan Update which are unknown at this time.

Annotation 3:

On December 14, 2017, by Resolution 17-46, CARB adopted the final 2030 Target Scoping Plan Update, which establishes a path to achieve California's goal of reducing statewide GHG emissions 40% below 1990 levels by 2030, and to substantially advance toward achieving the State's 2050 climate goal to reduce GHG emissions by 80% below 1990 levels.[1] As adopted, the 2030 Target Scoping Plan Update sets forth a package of technologically feasible actions to keep California on track to achieve its 2030 and 2050 targets, including but not limited to programs and policies to double energy efficiency savings, increase use of clean vehicle and fuels, prioritize direct GHG reductions, support Cap-and-Trade, achieve California's renewable energy portfolio standards, and invest in communities to reduce emissions.

As explained in Annotation 2, the 2017 Scoping Plan recommends statewide targets of no more than 6 $MTCO_2e$ per capita by 2030, and no more than 2 $MTCO_2e$ per capita by 2050.[2] The Project's GHG Efficiency based on the estimated service population decreased from 3.02 as presented in the DEIR Quantified GHG Emissions to 1.93 as calculated in the Updated GHG Calculations.[3] The Project's GHG Efficiency of 1.93 at Project buildout is thus below the Scoping Plan's 2030 and 2050 per capita targets.

1. Updated GHG Report at 13-14; *see also*, D. Freidman *et al*. 2018. *California, Greenhouse Gas Regulation, and Climate Change*. Chapman University Center for Demographics & Policy. Page 7.
2. Updated GHG Report at 14.
3. *Ibid*.

Senate Bill 32

SB 32, signed into law on September 8, 2016, requires CARB to ensure that statewide greenhouse gas emissions are reduced to at least 40 percent below the 1990 statewide greenhouse gas level no later than December 31, 2030. Per SB 32, CARB is to achieve this 2030 GHG reduction target by "adopting rules and regulations to achieve the maximum technologically feasible and cost-effective greenhouse gas emissions reductions[.]" See Health & Safety Code Section 38566. The new SB 32 GHG reduction mandate is the same as the GHG reduction included in Executive Order B-30-15 of 40 percent below 1990 levels by 2030. As discussed above, CARB is the process of preparing the 2030 Target Scoping Plan Update, which is intended to build upon and leverage the framework for achieving

California's GHG reduction mandate established in the initial Scoping Plan and its first update, and to define the state's climate change priorities for the next 14 years and beyond.

Assembly Bill 197

AB 197 is a companion to, and was enacted on the same day as, SB 32 (i.e., September 8, 2016). AB 197 adds two non-voting members to the CARB board, establishes certain qualifications for CARB board membership, and creates a six member Joint Legislative Committee on Climate Change Policies to determine facts and make recommendations to the Legislature regarding California climate change policy. Under AB 197, the CARB Chair is required to appear before this committee on an annual basis and present annual information regarding GHG emissions, toxic air contaminants, and criteria pollutants generated by all economic sectors covered by the Scoping Plan. AB 197 further authorizes the committee to establish an expert panel to independently analyze the State's climate change policies. In addition, AB 197 requires CARB to make available on its website, and updated annually, all GHG emissions, criteria pollutants, and toxic air contaminant information broken down to a local level for stationary sources and sub-county level for mobile sources. AB 197 also obligates CARB, when adopting rules and regulations that achieve emission reductions beyond statewide GHG emission limits to consider "social costs" and to prioritize (a) emissions reductions from large stationary sources of GHG emissions, and (b) direct emission reductions from mobile sources. For purposes of AB 197, "social costs" is defined to mean "an estimate of the economic damages, including, but not limited to, changes in net agricultural productivity; impacts to public health; climate adaptation impacts, such a property damages from increased flood risk; and changes in energy system costs, per metric ton of greenhouse gas emissions per year." Finally, AB 197 requires each Scoping Plan update to identify for each of its emission reduction measures (i) the range of air pollution reductions and GHG emissions reductions projected to result from each measure, and (ii) the cost-effectiveness, including avoided social costs, of each measure.

Senate Bill 375 (Land Use Planning)

SB 375 became law on (date) and it provides for a new planning process to coordinate land use planning, regional transportation plans, and funding priorities in order to help California meet the GHG reduction goals established in AB 32 (California 2008b). SB 375 requires Metropolitan Planning Organizations (MPOs) relevant to the project area (including SCAG) to incorporate a "sustainable communities strategy" (SCS) in their regional transportation plans (RTPs) that will achieve GHG emission reduction targets set by CARB. SB 375 also includes provisions for streamlined CEQA review for some infill projects such as transit-oriented development. SB 375 will be implemented over the next several years.

SB 375 is similar to the Regional Blueprint Planning Program, established by the California Department of Transportation, which provides discretionary grants to fund regional transportation and land use plans voluntarily developed by MPOs working in cooperation with Councils of Governments. On April 22, 2009, the Metropolitan Transportation Commission (MTC) adopted the 2009 Regional Transit Plan (RTP) with AB 32 goals in mind. The 2012 RTP was SCAG's first plan subject to SB 375. The Scoping Plan, adopted by CARB

in December of 2008, relies on the requirements of SB 375 to implement the carbon emissions reductions anticipated from land use decisions.

SB 375 also required CARB to appoint a Regional Targets Advisory Committee (RTAC) to recommend factors for CARB to consider and methodologies for it to use in setting GHG emission reduction targets for each region. The RTAC must include representation from the League of California Cities, the California State Association of Counties, MPOs, developers, planning organizations, and other stakeholders. In January 2009, CARB appointed 21 members to the RTAC. On September 29, 2009, the RTAC released its recommendations to CARB, representing a key step in the establishment of regional targets for inclusion in sustainable community strategies (RTAC 2009). The RTAC recommendations focus largely on the manner in which CARB staff should interact with various stakeholders during the target-setting process, and how staff should use empirical studies and modeling in establishing regional GHG targets.

Following the release of RTAC's recommendations, CARB began the process of developing regional GHG reduction targets (Regional Targets) for the State's MPOs. On September 23, 2010, CARB adopted Regional Targets applying to the years 2020 and 2035 (CARB 2011e). For the area under SCAG's jurisdiction—including the Project area—CARB adopted Regional Targets of 8 percent for 2020 and 13 percent for 2035. On February 15, 2011, the CARB's Executive Officer approved the final targets (CARB 2011f). CARB filed a Notice of Decision two days later on February 17, 2011 (CARB 2011e). CARB is considering further changes to the SB 375 MPO GHG reduction targets, with workshops scheduled in March of 2017 and new targets to be set following CARB approval of the 2030 Scoping Plan Target Update. The new targets will take effect as of the next MPO approval cycle for the Regional Transportation Plan/Sustainable Communities Strategy, which for SCAG will occur in 2020.

Senate Bill 605 and the Short-Lived Climate Pollutant Reduction Strategy

On September 21, 2014, Governor Jerry Brown signed Senate Bill 605 (SB 605), which requires CARB to complete a comprehensive strategy to reduce emissions of short-lived climate pollutants in the state no later than January 1, 2016. As defined in the statute, short-lived climate pollutant means "an agent that has a relatively short lifetime in the atmosphere, from a few days to a few decades, and a warming influence on the climate that is more potent than that of carbon dioxide." SB 605, however, does not prescribe specific compounds as short-lived climate pollutants or add to the list of GHGs regulated under AB 32. In developing the strategy, CARB must complete an inventory of sources and emissions of short-lived climate pollutants in the state based on available data, identify research needs to address any data gaps, identify existing and potential new control measures to reduce emissions, and prioritize the development of new measures for short-lived climate pollutants that offer co-benefits by improving water quality or reducing other air pollutants that impact community health and benefit disadvantaged communities. The draft strategy released by CARB in September 2015 focuses on methane, black carbon, and fluorinated gases, particularly hydrofluorocarbons, as important short-lived climate pollutants. The draft strategy recognizes emission reduction efforts implemented under AB 32 (e.g., refrigerant management programs) and other regulatory programs (e.g., in-use diesel engines, solid waste diversion) along with additional measures to be developed. On November 28, 2016,

CARB released for 45-day public review and comment its Revised Proposed Short-Lived Climate Pollutant Reduction Strategy and the CARB board will consider its adoption at a public hearing scheduled for March 23 and 24, 2017 (CARB 2016d).

Senate Bills 1078, 107, and SBX1-2 (Renewable Portfolio Standards)

Established in 2002 under SB 1078 (California 2002b), and accelerated in 2006 under SB 107 (California 2006c) and again in 2011 under SBX1-2 (California 2011b), California's Renewable Portfolio Standard (RPS) requires retail sellers of electric services to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020. The 33 percent standard is consistent with the RPS goal established in the Scoping Plan (CARB 2008a). As interim measures, the Renewable Portfolio Standards require 20 percent of retail sales to be sourced from renewable energy by 2013 and 25 percent by 2016. Initially, the Renewable Portfolio Standard provisions applied to investor-owned utilities, community choice aggregators, and electric service providers. SBX1-2 added, for the first time, publicly owned utilities to the entities subject to RPS (California 2011b).

Senate Bill 1

Senate Bill 1 of 2006 (SB 1) established the statewide California Solar Initiative, also required the California Energy Commission (CEC) to implement regulations that require sellers of production homes to offer a solar energy system option to all prospective homebuyers. Besides offering solar as an option to prospective homebuyers, sellers of homes constructed on land for which an application for a tentative subdivision map has been deemed complete on or after January 1, 2011, must disclose to the prospective homebuyer the total installed cost of the solar option, the estimated cost savings associated with the solar energy system option, information about California solar energy system incentives, and information about the Go Solar California website. Sellers of production homes affected by this law may opt for the solar offset program rather than offer solar as an option to prospective homebuyers. The solar offset program requires sellers to install a solar system elsewhere which is equivalent to the aggregate capacity of solar that would have been installed in an affected subdivision if 20 percent of the buyers had opted for the solar option (California 2006d).

Assembly Bill 1109

Assembly Bill 1109 (AB 1109), the Lighting Efficiency and Toxic Reduction Act, requires the establishment of minimum energy efficiency standards for all general purpose lights. The standards are structured to reduce average statewide electrical energy consumption by not less than 50 percent from the 2007 levels for indoor residential lighting and not less than 25 percent from the 2007 levels for indoor commercial and outdoor lighting by 2018 (California 2007b).

Senate Bill 350

Senate Bill (SB) 350. Signed October 7, 2015, is the *Clean Energy and Pollution Reduction Act of 2015*. SB 350 is the implementation of some of the goals of EO B-30-15. The objectives of SB 350 are

(1) To increase from 33 percent to 50 percent, the procurement of our electricity from renewable sources.

(2) To double the energy efficiency savings in electricity and natural gas final end uses of retail customers through energy efficiency and conservation (California 2015b).

Title 24 Energy Efficiency Standards

The Energy Efficiency Standards for Residential and Nonresidential Buildings (Title 24, Part 6 of the *California Code of Regulations* [CCR]) were established in 1978 in response to a legislative mandate to reduce California's energy consumption. The CEC adopted the 2008 changes to the Building Energy Efficiency Standards in order to (1) "Provide California with an adequate, reasonably-priced, and environmentally-sound supply of energy" and (2) "Respond to Assembly Bill 32, the Global Warming Solutions Act of 2006, which mandates that California must reduce its greenhouse gas emissions to 1990 levels by 2020". The current applicable standards are the 2013 Standards, effective July 1, 2014. The 2016 Code went into effect on January 1, 2017 (CBSC 2015). The 2016 code is at least 28 percent more efficient for than the 2013 Code (CEC 2015a). The requirements of the energy efficiency standards result in the reduction of natural gas and electricity consumption. Both natural gas use and electricity generation result in GHG emissions.

Annotation 4:

On May 9, 2018, the California Energy Commission adopted the 2019 Energy Efficiency Standards for Residential and Nonresidential Buildings, Title 24, Part 6 of the California Code of Regulations (2019 Standards).[1] The 2019 Standards become effective January 1, 2020, and apply to newly constructed buildings and additions or alterations to existing buildings.[2] Significantly, the 2019 Standards require installation of solar photovoltaic systems on all newly constructed single-family homes, and update indoor and outdoor lighting standards for nonresidential buildings that maximize the use of LED technology.[3] As discussed in Annotation 2, and in Updated GHG Report Section 1, the air pollutant emissions presented in the Updated GHG Calculations are based in part on Project compliance with the 2019 Standards.

1. State Energy Resources Conservation and Development Commission Resolution No. 18-0509-2 (May 9, 2018).
2. California Energy Commission. March 2018. 2019 *Building Energy Efficiency Standards Frequently Asked Questions.* https://www.energy.ca.gov/title24/2019standards/documents/2018_Title_24_2019_Building_Standards_FAQ.pdf
3. *Ibid*.

Title 24 Green Building Standards

The 2013 California Green Building Standards Code (24 CCR, Part 11), also known as the CALGreen code, contains mandatory requirements and voluntary measures for new residential and nonresidential buildings (including buildings for retail, office, public schools and hospitals) throughout California (CBSC 2014). The development of the CALGreen Code is intended to (1) cause a reduction in greenhouse gas (GHG) emissions from buildings; (2) promote environmentally responsible, cost effective, healthier places to live and work;

(3) reduce energy and water consumption; and (4) respond to the directives by the Governor. In short, the code is established to reduce construction waste; make buildings more efficient in the use of materials and energy; and reduce environmental impact during and after construction.

The CALGreen Code contains requirements for construction site selection, storm water control during construction, construction waste reduction, indoor water use reduction, material selection, natural resource conservation, site irrigation conservation, and more. The code provides for design options allowing the designer to determine how best to achieve compliance for a given site or building condition. The code also requires building commissioning, which is a process for the verification that all building systems, such as heating and cooling equipment and lighting systems, are functioning at their maximum efficiency.

The CALGreen Code provides standards for bicycle parking, carpool/vanpool/electric vehicle spaces, light and glare reduction, grading and paving, energy efficient appliances, renewable energy, graywater systems, water efficient plumbing fixtures, recycling and recycled materials, pollutant controls (including moisture control and indoor air quality), acoustical controls, storm water management, building design, insulation, flooring, and framing, among others.

Beyond the mandatory standards, optional Tier 1 status can be achieved by complying with voluntary measures for energy and water efficiency, material conservation, and other design features. An example of a Tier 1 requirement is 12 percent less indoor water use in nonresidential construction. Tier 2 status can be achieved by complying with additional voluntary measures; an example requirement is 20 percent less indoor water use in nonresidential construction.

Executive Order S-01-07 and the Low Carbon Fuel Standard

Executive Order S-01-07 (January 18, 2007) requires a ten percent or greater reduction (from current transportation fuels) in the average fuel carbon intensity for CARB-regulated transportation fuels in California (California 2007a). CARB identifies the Low Carbon Fuel Standard (LCFS) as a Discrete Early Action item under AB 32.

In 2009, CARB approved for adoption the LCFS regulation, which became fully effective in April 2010 and is codified in the *California Code of Regulations* (CCR, specifically Title 17, Sections 95480–95490). The LCFS will reduce greenhouse gas emissions by reducing the carbon intensity of transportation fuels used in California by at least 10 percent by 2020. Carbon intensity is a measure of the GHG emissions associated with the various production, distribution, and use steps in the "lifecycle" of a transportation fuel. Following a federal lawsuit challenging the LCFS, on September 25, 2015, CARB re-adopted the LCFS regulation (CARB 2015b).

Assembly Bill 1493 (Mobile Source Reductions)

Assembly Bill (AB) 1493 required CARB to adopt regulations by January 1, 2005, to reduce GHG emissions from noncommercial passenger vehicles and light-duty trucks of model year

2009 and after (California 2002a). The bill required the California Climate Action Registry (CCAR) to develop and adopt protocols for the reporting and certification of GHG emissions reductions from mobile sources for use by CARB in granting emission reduction credits. The bill authorized CARB to grant emission reduction credits for reductions of GHG emissions prior to the date of the enforcement of regulations, using model year 2000 as the baseline for reduction.

In 2004, CARB applied to the USEPA for a waiver under the Federal Clean Air Act to authorize implementation of these regulations. The waiver request was formally denied by the USEPA in December 2007. In January 2008, the State Attorney General filed a lawsuit against the USEPA challenging the denial of California's request for a waiver to regulate and limit GHG emissions from these vehicles. In January 2009, President Barack Obama issued a directive to the USEPA to reconsider California's request for a waiver, which the USEPA granted on June 30, 2009, as discussed further below (USEPA 2009b). As part of this waiver, the USEPA specified that CARB may not hold a manufacturer liable or responsible for any noncompliance caused by emission debits generated by the manufacturer for the 2009 model year. The emission standards become increasingly more stringent through the 2016 model year. Regulations to make California emissions standards for model year 2017 and beyond consistent with federal standards were adopted in 2012 and are discussed further below.

CARB's Advanced Clean Cars Program

In January 2012, CARB approved the Advanced Clean Cars Program, a new emissions-control program for model year 2017 through 2025. The program combines the control of smog, soot and GHGs with requirements for greater numbers of zero-emission vehicles. By 2025, when the rules will be fully implemented, the new automobiles will emit 34 percent fewer global warming gases and 75 percent fewer smog-forming emissions. The program also requires car manufacturers to offer for sale an increasing number of zero-emission vehicles (ZEVs) each year, including battery electric, fuel cell, and plug-in hybrid electric vehicles.

In December 2012, CARB adopted regulations allowing car manufacturers to comply with California's GHG emissions requirements for model years 2017–2025 through compliance with the EPA GHG requirements for those same model years (CARB 2012).

Cap and Trade

Pursuant to AB 32, CARB was allowed, but not required, to include among mechanisms intended to reduce GHG emissions a "system of market-based declining annual aggregate emission limits". As noted above, CARB developed a Scoping Plan that directed CARB staff to develop, among other programs, a cap-and-trade mechanism that would apply a declining aggregate cap on GHG emissions and provide a flexible compliance system using tradable instruments. On October 20, 2011, CARB adopted the final cap-and-trade regulation (17 CCR Subchapter 10, Article 5). The program imposes a "cap" on the total GHG emissions from covered entities in the state, and the quantity of emissions allowed under the cap will decrease each year, ultimately reaching the goal of returning statewide GHG emissions to 1990 levels by 2020. The quantity of allowed emissions actually increased between 2014

and 2015, but that is to account for the addition of the fuel importers and distributors and additional electricity importers to the program as discussed below. The net effect is to reduce overall GHG emissions.

The cap-and-trade program started on January 1, 2012, and will proceed in "compliance phases", the first of which began on January 1, 2013. In the first phase, the program applies to electric utilities, importers of electricity, and specified industries, including refineries. Approximately 350 electric utilities and approximately 600 industrial facilities were included in the initial phase of the program. On January 1, 2015, cap-and-trade compliance obligations were phased in for suppliers of natural gas, reformulated gasoline blendstock for oxygenate blending (RBOB), distillate fuel oils, and liquefied petroleum gas that meet or exceed specified emissions thresholds. The threshold that triggers a cap-and-trade compliance obligation for a fuel supplier is 25,000 metric tons or more of CO_2e annually from the GHG emissions that would result from full combustion or oxidation of quantities of fuels (including natural gas, RBOB, distillate fuel oil, liquefied petroleum gas, and blended fuels that contain these fuels) imported and/or delivered to California. Phasing in of cap-and-trade compliance obligations for transportation fuel providers further reduces GHG emissions attributable to mobile sources, beyond the GHG emissions reductions achieved by the Pavley Standard, LCFS, and Advanced Clean Cars Program discussed above. This analysis does not incorporate GHG emissions reductions based on cap-and-trade compliance obligations applicable to transportation fuel suppliers.

Annotation 5:

On July 25, 2017, the Governor signed into law **Assembly Bill 398**, which reauthorizes the continuation of the Cap and Trade program through December 31, 2030.[1] The following day, July 26, 2017, the Governor signed into law **Assembly Bill 617**, a companion bill to AB 398, that requires CARB to develop a statewide air quality monitoring plan and to select priority locations for the placement of community air monitoring systems.[2] AB 617 requires CARB to work with local air districts and communities to develop and implement plans to reduce the emission of criteria air pollutants.

1. Legis. Counsel's Dig., Assem. Bill No. 398 (2016-2017 Reg. Sess.)
2. Legis. Counsel's Dig., Assem. Bill No. 617 (2016-2017 Reg. Sess.)

California Integrated Waste Management Act of 1989

The California Integrated Waste Management Act of 1989 (*California Public Resources Code,* Sections 40000 et seq.) requires each jurisdiction's source reduction and recycling element to include an implementation schedule that shows (1) diversion of 25 percent of all solid waste by January 1, 1995, through source reduction, recycling, and composting activities and (2) diversion of 50 percent of all solid waste on and after January 1, 2000, through source reduction, recycling, and composting facilities. Additionally, jurisdictions are not prohibited from implementing source reduction, recycling, and composting activities designed to exceed these requirements.

Assembly Bill 341

Assembly Bill 341 amended the California Integrated Waste Management Act of 1989 to include a provision declaring that it is a policy goal of the State that not less than 75 percent of solid waste generated be source reduced, recycled, or composted by the year 2020, and annually thereafter. In addition, AB 341 required the California Department of Resources Recycling and Recovery (CalRecycle) to develop strategies to achieve the State's policy goal. CalRecycle conducted several stakeholder workshops and published a discussion document in May 2012 titled California's New Goal: 75 Percent Recycling, which identifies concepts that CalRecycle believes would assist the State in reaching the 75 percent goal by 2020 (CalRecycle 2016a).

Assembly Bill 1826

In October 2014 Governor Brown signed AB 1826 Chesbro (Chapter 727, Statutes of 2014), requiring businesses to recycle their organic waste on and after April 1, 2016, depending on the amount of waste they generate per week. This law also requires that on and after January 1, 2016, local jurisdictions across the state implement an organic waste recycling program to divert organic waste generated by businesses, including multifamily residential dwellings that consist of five or more units (however, multifamily dwellings are not required to have a food waste diversion program). Organic waste (also referred to as organics) means food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste. This law phases in the mandatory recycling of commercial organics over time. In particular, the minimum threshold of organic waste generation by businesses decreases over time, which means an increasingly greater proportion of the commercial sector will be required to comply (CalRecycle 2016b).

California Water Code

Sections 10910 through 10915 of the *California Water Code* require preparation of a project-specific Water Supply Assessment for developments consisting of 500 or more dwelling units. Sections 10610.4, 10617, and 10620 of the *California Water Code* require urban water suppliers to develop water management plans to actively pursue the efficient use of available supplies.

State Model Water Efficient Landscape Ordinance (MWELO) and Executive Order B-29-15

The MWELO (23 CCR Division 2, Chapter 2.7) establishes an outdoor water budget for new landscaped areas that are 500 square feet or larger, and rehabilitated landscaped areas that are 2,500 square feet or larger (DWR 2015). Executive Order (EO) B-29-15 called for revisions to the MWELO in order to increase water efficiency standards for new and rehabilitated landscapes through more efficient irrigation systems, greywater usage, on-site storm water capture, and by limiting the portion of landscapes that can be covered in turf. It also established a goal of achieving a statewide reduction in potable urban water usage of 25 percent relative to water use in 2013 (California 2015b). The California Department of Water Resources (DWR) updated the MWELO in December 2015 to incorporate these

elements and the emergency drought regulations set forth by EO B-29-15, which establish improved efficiency standards for water appliances.

Senate Bill X7-7 (Water Conservation Act of 2009)

The Water Conservation Act of 2009 sets an overall goal of reducing per-capita urban water use by 20 percent by December 31, 2020. The State is required to make incremental progress toward this goal by reducing per-capita water use by at least 10 percent by December 31, 2015. This in an implementation measure of the Water Sector of the AB 32 Scoping Plan. Reduction in water consumption directly reduces the energy necessary and the associated emissions to convey, treat, and distribute the water; it also reduces emissions from wastewater treatment.

The DWR adopted a regulation on February 16, 2011, that sets forth criteria and methods for exclusion of industrial process water from the calculation of gross water use for purposes of urban water management planning. The regulation would apply to all urban retail water suppliers required to submit an Urban Water Management Plan, as set forth in the *California Water Code* (specifically, Division 6, Part 2.6, Sections 10617 and 10620).

CARB Airborne Toxic Control Measures and Emission Standards

CARB adopted an airborne toxic control measure to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to diesel particulate matter (PM) and other toxic air contaminants, and promulgated emission standards for off-road diesel construction equipment such as bulldozers, loaders, backhoes, and forklifts, as well as many other self-propelled off-road diesel vehicles.

Senate Bill 97 (State CEQA Guidelines)

SB 97 required OPR to prepare amended the State CEQA Guidelines for submission to the California Natural Resources Agency (CNRA) regarding GHG analysis and feasible mitigation of the effects of GHG emissions as required by CEQA. These amendments became effective as of March 18, 2010. The adoption of SB 97 and subsequent CEQA amendments are widely recognized as confirmation that lead agencies are required to include an analysis of climate change impacts in CEQA documents.

CEQA Amendments

Pursuant to SB 97, OPR developed proposed amendments to the State CEQA Guidelines (CEQA Amendments) for the feasible mitigation of GHG emissions and their effects, which it first submitted to the Secretary of the CNRA on April 13, 2009. After a public review and comment period, on December 30, 2009, the CNRA adopted the CEQA Amendments, which became effective on March 18, 2010.

The CEQA Amendments for Greenhouse Gas Emissions state in Section 15064.4(a) that lead agencies should "make a good faith effort, to the extent possible on scientific and factual data, to describe, calculate or estimate" GHG emissions. The CEQA Amendments note that an agency may identify emissions by either selecting a "model or methodology" to quantify the

emissions or by relying on "qualitative analysis or other performance based standards" (CNRA 2009b). Section 15064.4(b) provides that the lead agency should consider the following when assessing the significance of impacts from GHG emissions on the environment (CNRA 2009b):

- The extent a project may increase or reduce GHG emissions as compared to the environmental setting.
- Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
- The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

In addition, Section 15064.7(c) of the CEQA Amendments specifies that "[w]hen adopting thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence" (CNRA 2009b). Similarly, the revisions to Appendix G, Environmental Checklist Form, which is often used as a basis for lead agencies' selection of significance thresholds, does not prescribe specific thresholds. Rather, Appendix G asks whether the project would conflict with a plan, policy or regulation adopted to reduce GHG emissions or would generate GHG emissions that would significantly affect the environment, indicating that the determination of what is a significant effect on the environment should be left to the lead agency.

Accordingly, the CEQA Amendments do not prescribe specific methodologies for performing an assessment; they do not establish specific thresholds of significance; and they do not mandate specific mitigation measures. Rather, the CEQA Amendments emphasize the lead agency's discretion to determine the appropriate methodologies and thresholds of significance consistent with the manner in which other impact areas are handled in CEQA (CNRA 2009b).

The CEQA Amendments indicate that lead agencies should consider all feasible means, supported by substantial evidence and subject to monitoring and reporting, of mitigating the significant effects of GHG emissions. As pertinent to the Project, these potential mitigation measures, set forth in Section 15126.4(c), may include (1) measures in an existing plan or mitigation program for the reduction of GHG emissions that are required as part of the lead agency's decision; (2) reductions in GHG emissions resulting from a project through implementation of project design features; (3) off-site measures, including offsets, to mitigate a project's emissions; and (4) carbon sequestration measures (CNRA 2009b).

Among other things, the CNRA noted in its Public Notice for these changes that impacts of GHG emissions should focus on the cumulative impact on climate change. The Public Notice states (CNRA 2009c):

> While the Proposed Amendments do not foreclose the possibility that a single project may result in greenhouse gas emissions with a direct impact on the environment, the evidence before [CNRA] indicates that in most cases, the impact will be cumulative. Therefore, the Proposed Amendments emphasize that the analysis of greenhouse gas emissions should center on whether a project's incremental contribution of greenhouse gas emissions is cumulatively considerable.

Thus the CEQA Amendments continue to make clear that the significance of greenhouse gas emissions is most appropriately considered on a cumulative level.

Other Potentially Applicable State Regulations or Policies

Executive Order S-13-08

On November 14, 2008, Governor Schwarzenegger issued Executive Order S-13-08 instructing California agencies to assess and prepare for the impacts of rising sea level associated with climate change (California 2008c).

The resulting 2009 California Climate Adaptation Strategy (CAS) report was developed by the CNRA in coordination with the Climate Action Team (CAT). The report presents the best available science relevant to climate impacts in California and proposes a set of recommendations for California decision-makers to assess vulnerability and promote resiliency in order to reduce California's vulnerability to climate change. Guidance regarding adaptation strategies is general in nature and emphasizes incorporation of strategies into existing planning policies and processes.

In addition to requiring the CAT to create a Climate Adaptation Strategy, Executive Order S-13-08 ordered the creation of a comprehensive Sea Level Rise Assessment Report. The report, published in June 2012, indicates that the sea level along most of California's coast is expected to rise about one meter over the next century and is likely to increase the risk of damage in the form of flooding, coastal erosion, and wetland loss due to storm surges and high waves. The sea level increase is slightly higher than projected for global sea levels (National Research Council 2012).

Executive Order S-13-08 also called for the California Ocean Protection Council (OPC) to work with the other CAT State agencies to develop interim guidance for assessing the potential impacts of sea level rise due to climate change in California. In coordination with National Academy of Sciences (NAS) efforts, the OPC drafted interim guidance recommending that State agencies consider a range of sea level rise scenarios for the years 2050 and 2100 in order to assess project vulnerability, reduce expected risks, and increase resiliency to sea level rise. The draft resolution and interim guidance document is consistent with the Ocean Protection Act (*California Public Resource Code,* Division 26.5, Section 35615[a][1]), which specifically directs the OPC to coordinate activities of State agencies to improve the effectiveness of State efforts to protect ocean resources (CNRA 2014; Sea Level Rise Task Force 2010). An update to the 2009 CAS report, the final "Safeguarding California Plan", was published in July 2014.

Assembly Bill 1613 (Waste Heat and Carbon Emissions Reduction Act)

AB 1613 directed the CEC, the California Public Utilities Commission (CPUC), and CARB to implement the Waste Heat and Carbon Emissions Reduction Act, which is designed to encourage development of new combined heat and power (CHP) systems in California with a generating capacity of not more than 20 megawatts. In June 2010 and updated in 2015, the CEC published modified final guidelines establishing technical criteria for eligibility of CHP systems for programs to be developed by the CPUC and publicly owned utilities (CEC 2015b). Section 2840 of the Act provides that the CEC's guidelines require that CHP systems:

- Be designed to reduce waste energy;
- Have a minimum efficiency of 60 percent;
- Have nitrogen oxides (NOx) emissions of no more than 0.07 pound per megawatt-hour;
- Be sized to meet the eligible customer generation thermal load;
- Operate continuously in a manner that meets the expected thermal load and optimizes the efficient use of waste heat; and
- Be cost-effective, technologically feasible, and environmentally beneficial.

As directed by AB 1613, the CPUC also established (1) a standard tariff for the sale of electricity to electricity corporations for delivery to the electrical grid and (2) a "pay as you save" pilot program requiring electricity corporations to finance the installation of qualifying CHP systems by non-profit and government entities. A January 2011 decision by an administrative law judge determined that the pilot program will not be established due to lack of customer interest and difficulties in instituting a program that meets California Department of Corporations requirements (Decision 11-01-010 Before the Public Utilities Commission of the State of California 2011).

Executive Order B-16-12

On March 23, 2012, Governor Brown issued EO-B-16-12, which orders CARB, the CEC, the CPUC, and other relevant agencies to facilitate the rapid commercialization of zero-emission vehicles (ZEVs), and sets a target for the number of ZEVs in California at 1.5 million by 2025. The Executive Order also directs that the California's state vehicle fleet increase the number of its ZEVs through the normal course of fleet replacement so that at least 10 percent of fleet purchases of light-duty vehicles be zero-emission by 2015 and at least 25 percent by 2020. Further, the Executive Order also sets a target for a reduction of GHG emissions from the transportation sector equaling 80 percent less than 1990 levels by 2050.

Senate Bill 391 and California Transportation Plan 2040

On October 11, 2009, Governor Brown signed into law SB 391, which directs the California Department of Transportation (Caltrans) to update the California Transportation Plan to address how the state will achieve maximum feasible emissions reductions in order to attain a statewide reduction of GHG emissions to 1990 levels by 2020 and 80 percent below 1990

levels by 2050. Per SB 391, the California Transportation Plan update must be adopted by December 31, 2015 and updated every five years thereafter. Pursuant to SB 391, in June 2016, Caltrans adopted California Transportation Plan 2040 (CTP 2040), which provides a long-range policy framework to meet future statewide mobility needs and reduce greenhouse gas emissions for the transportation sector. (Caltrans 2016a) The CTP 2040 outlines goals and recommendations to achieve a safe, sustainable, accessible, and competitive transportation system that provides reliable mobility while meeting the state's GHG reduction goals over a 20 year planning horizon. Per SB 391, the CTP 2040 is scheduled to be updated every five years, starting in 2021.

Executive Order B-32-15 and the California Sustainable Freight Action Plan

Executive Order B-32-15 (July 17, 2015) requires the California State Transportation Agency, the California Environmental Protection Agency, the California Natural Resources Agency, CARB, Caltrans, the California Energy Commission, and the Governor's Office of Business and Economic Development to develop an integrated action plan by July 2016 to establish clear targets to improve freight efficiency and transition to zero-emission technologies, and to identify state policies, programs, and investments to meet these targets. Pursuant to Executive Order B-32-15, in July 2016, the participating agencies published the California Sustainable Freight Action Plan (Freight Action Plan) (CARB 2016b). The Freight Action Plan recommends a high-level vision for a sustainable freight transportation system and 11 guiding principles for state agencies to utilize when developing specific policies, investments, and programs related to the California freight transportation system. The Freight Action Plan also establishes targets to (i) improve freight system efficiency 25 percent by increasing the value of goods and services produced from the freight sector relative to amount of carbon that it produces by 2030, and (ii) deploy over 100,000 freight vehicles and equipment capable of zero emission operation and to maximize near-zero emission freight vehicles and equipment powered by renewable energy by 2030. Per the Freight Action Plan, its targets are not mandates, but rather aspirational measures of progress toward sustainability for the State to meet and try to exceed; under the plan, state agencies will measure and report progress on the statewide Freight Action Plan targets, and evaluate the targets to determine necessary adjustments.

California 2016 Mobile Source Strategy

On May 16, 2016, CARB published the updated Mobile Source Strategy 2016, which establishes a comprehensive statewide strategy to reduce emissions from mobile sources to meet climate change and air quality goals over a fifteen year planning horizon. (CARB 2016c) The Mobile Source Strategy sets forth several measures CARB is proposing to achieve its mobile source emission reduction goals, including a heavy-duty low NOx engine standards and a "last-mile" delivery regulation that would require the use of low-NOx engines as a stepping stone to zero-emission trucks. The Mobile Source Strategy also provides a framework to inform updates to the State Implementation Plan strategy, the California Sustainable Freight Action Plan, and the Short-Lived Climate Pollution Reduction Strategy, and revises the Advance Clean Transit strategy to include low-NOx engines to transit busses. Additional mobile source emission reduction measures described in the Mobile Source Strategy include: expanding the requirements for cleaner low carbon fuels; incentives for the

turnover of equipment and fleets to the cleanest technologies; pilot studies to demonstrate new clean technologies; programs to ensure that emission control systems remain durable over vehicle lifetimes.

California New Residential Zero Net Energy Action Plan

In June 2015, the California Energy Commission and the California Public Utilities Commission jointly published the *California New Residential Zero Net Energy Action Plan 2015-2020* (ZNE Plan) (CEC 2015c). The ZNE Plan is designed to operationalize the State's goal to have 100% of new homes achieve zero net energy (ZNE) by establishing guiding principles for establishing a regulatory framework achieving that goal by 2020 (CEC 2015c). Starting in 2008, the Title 24 energy efficiency requirements for residential homes have been periodically ratcheted up with the objective of eventually achieving the ZNE goal, with updates adopted in 2013 (effective 2014) and 2016 (effective 2017). With each update, the Title 24 standards efficiency requirements have increased at a rate of 12-15% in each cycle. The 2016 standards that went into effect on January 1, 2017 get still closer to ZNE by requiring, for example, high efficiency lighting, high efficiency walls and attics with increased continuous insulation, and high efficiency water heating systems. According to the ZNE Plan, the 2019 update to Title 24 (effective 2020) will require full ZNE for all new residential construction.

Regional

Antelope Valley Air Quality Management District

The AVAQMD has adopted GHG emissions requirements into the appropriate Rules and Regulations. The AVAQMD's *CEQA and Federal Conformity Guidelines* (2011) establishes a CEQA significance threshold of 100,000 tons (90,718 metric tons) of CO_2e per year for GHG emissions, as discussed in Section 5.21.6, Environmental Impacts.

South Coast Air Quality Management District

On December 5, 2008, the SCAQMD Governing Board adopted its staff proposal for an interim CEQA GHG significance threshold for projects where the SCAQMD is the lead agency (SCAQMD 2008). Currently, the SCAQMD Governing Board has only adopted thresholds relevant to industrial (stationary source) projects. To achieve a policy objective of capturing 90 percent of GHG emissions from new residential/commercial development projects and implement a "fair share" approach to reducing emission increases from each sector, SCAQMD staff have proposed as a draft approach combining performance standards and screening thresholds. At this time, the SCAQMD has not adopted any significance thresholds for new residential, commercial, or mixed use development projects, but has proposed several draft thresholds over the last few years. The SCAQMD's latest iteration of proposed thresholds, as introduced in September 2010 (SCAQMD 2010), are discussed in Section 5.21.6, Environmental Impacts.

Since sharing the proposed approach to CEQA significance at its GHG CEQA Significance Threshold Stakeholder Working Group meeting in September 2010, the SCAQMD has cancelled all subsequent meetings and no schedule has been issued for how or when

thresholds will be established. The Working Group has not convened since the fall of 2010. As of the preparation of this Draft EIR, the proposal has not been considered or approved for use by the SCAQMD Board.

Southern California Association of Governments

As described above, SB 375 requires the MPOs to prepare a Sustainable Communities Strategy (SCS) in their regional transportation plan. SCAG's SCS is included in the SCAG 2012–2035 Regional Transportation Plan Sustainable Communities Strategy (RTP/SCS) (SCAG 2012a). The document was adopted by SCAG in April 2012. The goals and policies of the RTP/SCS that reduce vehicle miles traveled (VMT) focus on transportation and land use planning that include building infill projects, locating residents closer to where they work and play and designing communities so there is access to high quality transit service. The 2012–2035 RTP/SCS is expected to reduce per capita transportation emissions of 9 percent by 2020 and 16 percent by 2035. In June of 2012, CARB accepted SCAG's determination that the Final RTP/SCS would meet the region's GHG reduction target.

SCAG's SCS is now included in its 2016–2040 RTP/SCS. The document was adopted by SCAG on April 7, 2016. The 2016–2040 RTP/SCS is expected to reduce per capita transportation emissions by 8 percent by 2020 and by 18 percent by 2035 (SCAG 2016a).

Metro Countywide Sustainability Planning Policy and Implementation Plan

The *Metro Countywide Sustainability Planning Policy and Implementation Plan*, approved in December 2012, builds upon existing federal, State, regional, and local sustainability policies and plans. This policy serves as a guidance and implementation tool to increase coordination and collaboration across transportation modes, planning disciplines, and government agencies. The main goals of this policy are to improve air quality and increase transportation choices in Los Angeles County (Metro 2012).

Metro Complete Streets Policy

The *Metro Complete Streets Policy* was developed by the Los Angeles County Metropolitan Transportation Authority (Metro) in October 2014, and serves as a standard for comprehensive, multimodal transportation system design in Los Angeles County. This policy uses the existing policies established by the *Metro Countywide Sustainability Planning Policy and Implementation Plan* and builds upon them by clarifying and adding goals. These goals further encourage a multimodal transportation system by promoting active transportation, and add goals similar to those of the CTP 2040 by encouraging safety and healthy, equitable communities (Metro 2014).

Local – Los Angeles County

Countywide Energy and Environmental Policy

The Countywide Energy and Environmental Policy (Policy) was adopted by the Los Angeles County Board of Supervisors on January 16, 2007, to provide guidelines for the development and enhancement of energy conservation and environmental programs within County

departments. The Policy was also the County's response for the need for energy conservation and reduction in GHG emissions. It directs the County to track its GHG emissions with the California Climate Action Registry, and to reduce its facilities' energy consumption by 20 percent by the year 2015. Under this policy, the Los Angeles County Energy Program (LACEP) provides financing for energy efficiency or solar improvements, and the County's Capital Project Program requires all new County buildings (i.e., greater than 10,000 square feet) to be Leadership in Energy and Environmental Design (LEED™) Certified at the Silver Level (CCAR 2009a).

Revisions to the Policy, adopted on June 30, 2015, enhance the County's existing and future policies programs, and reporting with regard to environmental sustainability. Further, the 2015 revisions established a County Sustainability Council with responsibilities that include, but are not limited to, developing consistent approaches and metrics to provide County services in an environmentally sustainable manner and leading efforts to acquire funding for countywide or regional sustainability programs (LACISD 2015).

Additionally, the County has pledged to be a "Cool County" by establishing a GHG emissions footprint; developing a GHG mitigation plan; working with local entities to reduce regional GHGs by 80 percent by 2050; and supporting federal legislation to raise CAFE standards. In addition, the County has implemented various internal programs on energy conservation; water conservation; waste reduction and recycling; green purchasing and contracting; and alternative fuel vehicle purchasing. On January 13, 2009, the County created an action plan for developing a Comprehensive Renewable Energy Program to develop renewable energy projects on existing County facilities and properties.

In 2009, the Los Angeles County Board of Supervisors directed the Chief Executive Officer (CEO) to take actions toward the use of renewable energy. The actions focused upon cost-benefit analyses. The CEO was directed to examine the practicality of Los Angeles County offsetting between 10 percent and 100 percent of current electrical needs through the use of renewable energy, including the purchase of renewable energy credits. The CEO was also instructed to compare costs and benefits of purchasing electricity from renewable energy sources to the costs and benefits of investing money in improving the energy efficiency of the County's operations.

The CEO provided a report to the County with a proposal to include (1) a cost analysis feasibility assessment; (2) recommendations regarding constituent-focused initiatives to be included in the Program; (3) an analysis of community choice aggregation, home energy audits, financing of residential renewable energy products, and other initiatives as deemed appropriate. The May 5, 2014 Energy & Environmental Policy Report #9 updated the accomplishments and activities of the County Office of Sustainability. The Report identified the creation of the Los Angeles County Energy Program, which is a comprehensive home energy retrofit program, and staff training sessions to promote sustainable construction and building operations (LACISD 2014).

Los Angeles County General Plan

The Los Angeles County 2035 General Plan and Programmatic EIR were adopted by the Los Angeles County Board of Supervisors on October 6, 2015. There are five Guiding Principles that serve as the foundation of the General Plan and all future growth within the County. The Guiding Principles are to (1) employ smart growth; (2) ensure community services and infrastructure are sufficient to accommodate growth; (3) provide the foundation for a strong and diverse economy; (4) promote excellence in environmental resource management; and (5) provide healthy, livable, and equitable communities (DRP 2015b). In addition to the Guiding Principles, the General Plan provides the policy framework for how and where the unincorporated County will grow through the year 2035, while recognizing and celebrating the County's wide diversity of cultures, abundant natural resources, and status as an international economic center. The Los Angeles County 2035 General Plan accommodates new housing and jobs within the unincorporated areas in anticipation of population growth in the County and the region (DRP 2014). The Final EIR addresses the environmental effects associated with the implementation on the Los Angeles County 2035 General Plan. The FEIR finds that Greenhouse Gas Emissions Impacts would be significant and unavoidable without the implementation of Community Climate Action Plan (DRP 2014).

Los Angeles County Community Climate Action Plan

The *Final Unincorporated Los Angeles County Community Climate Action Plan 2020* (CCAP) is part of the County General Plan under the Air Quality Element and was adopted along with the General Plan on October 6, 2015. The County acknowledges the consensus among leading scientists that without action to reduce GHG emissions, climate change due to global warming will pose a considerable threat to the environment and to human health and society (DRP 2015a).

The CCAP is being implemented by the County to mitigate and avoid GHG emissions associated with community activities in unincorporated Los Angeles County. The CCAP addresses emissions from building energy, land use and transportation, water consumption, and waste generation. The measures and actions outlined in the CCAP tie together with the County's climate change initiatives and provides a blueprint for a more sustainable future. To reduce the impacts of climate change, the County has set a target to reduce GHG emissions from community activities in the unincorporated areas of Los Angeles County by at least 11 percent below 2010 levels by 2020, which is consistent with AB 32 targets. The CCAP describes the County's plan for achieving this goal, including specific strategy areas for each of the major emissions sectors, and provides details on the 2010 and projected 2020 emissions in the unincorporated areas.

The actions in the CCAP are priority actions and intended for near-term implementation such that the County can achieve its GHG reduction goal for 2020 for the unincorporated areas of Los Angeles County. The County has designated a CCAP Implementation Team (CIT) to lead and coordinate the County's efforts on CCAP implementation, monitoring, and plan updates. The following is a list of general implementation steps that the County will undertake to implement each CCAP local action.

- Develop implementation plans for each CCAP action
- Estimate project-specific costs
- Adopt or update ordinances and/or codes
- Establish partnerships
- Pursue funding sources
- Create monitoring/tracking processes and indicators
- Engage the community and stakeholders in CCAP action implementation

The environmental impacts associated with implementation of the CCAP were analyzed in the *Los Angeles County General Plan Update Environmental Impact Report* (SCH# 2011081042) certified by the County on October 6, 2015.

Los Angeles County General Plan and Antelope Valley Area Plan

The *Los Angeles County General Plan* and the *Antelope Valley Area Plan* (AVAP) include goals and policies that address greenhouse gases in the unincorporated County. The AVAP goals and policies applicable to the analysis of greenhouse gas emissions with Project implementation are listed below.

Goal LU 5: A land use pattern that decreases greenhouse gas emissions.

> **Policy LU 5.1:** Ensure that development is consistent with the Sustainable Communities Strategy adopted in 2012, an element of the Regional Transportation Plan developed by the Southern California Association of Governments.
>
> **Policy LU 5.2:** Encourage the continued development of rural town centers that provide for the daily needs of surrounding residents, reducing the number of vehicle trips and providing local employment opportunities.
>
> **Policy LU 5.3:** Preserve open space areas to provide large contiguous carbon sequestering basins.
>
> **Policy LU 5.4:** Ensure that there is an appropriate balance of residential uses and employment opportunities within close proximity of each other.

Goal COS 17: Buildings are sustainable, conserving energy, water, and other resources, and limiting greenhouse gas emissions.

> **Policy COS 17.1:** Promote green building techniques for the construction and operation of public and private buildings in the unincorporated Antelope Valley.
>
> **Policy COS 17.2:** Require that new buildings be sited and designed in a manner that maximizes efficient use of natural resources, such as air and light, to reduce energy consumption, heat profiles, and greenhouse gas emissions.

Policy COS 17.4: Promote the use of individual renewable energy systems and require appropriate development standards for such systems to minimize potential impacts to surrounding properties. Simplify the permitting process for individual renewable energy systems that meet these development standards.

Policy COS 17.5: Protect active and passive solar design elements and systems from shading by neighboring structures and trees through appropriate development standards.

Policy COS 17.6: Require new landscaping to comply with applicable water efficiency requirements in the County Code.

Policy COS 17.7: Require low-flow plumbing fixtures in all new developments.

Policy COS 17.9: Require reduction, reuse, and recycling of construction and demolition debris.

Los Angeles County Green Building Standards Code (Title 31)

In November 2013, the Board of Supervisors adopted the Los Angeles County Green Building Standards Code (Title 31) in response to the mandates set forth in the CALGreen Code (2010 Green Building Standards Code) (CBSC 2014). Title 31 became effective on January 1, 2014. Title 22 (Planning and Zoning Code) Green Building and Drought Tolerant Landscaping requirements are now found in Title 31. The purpose of Title 31 is to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the use of building concepts that have a reduced negative impact or positive environmental impact and that encourage sustainable construction practices in planning and design; energy efficiency; water efficiency and conservation; material conservation and resource efficiency; and environmental air quality (Title 31 of the Los Angeles County Code). Notably, Title 31 requires nonresidential buildings that are equal to or greater than 25,000 square feet (sf) to comply with the CALGreen Code (specifically, Section A5.601.2.4, Voluntary measures for CALGreen Tier 1). These measures include, but are not limited to, requirements for energy efficiency, parking for fuel-efficient vehicles, cool roofs, reduction of indoor potable water use, recycled content of construction materials, reduction in construction and demolition waste, and thermal insulation (Los Angeles County 2016).

The County's drought-tolerant landscaping requirements establish minimum standards for the design and installation of landscaping using drought-tolerant plants and native plants that require minimal use of water. These requirements include the following: (1) a minimum of 75 percent of total landscaped area must utilize non-invasive drought-tolerant plant and tree species appropriate for the climate zone region; (2) a maximum of 25 percent of landscaped areas may be turf grass; and (3) hydrozoning irrigation techniques shall be incorporated into the landscape design. Title 31 also establishes low-impact development (LID) standards for new construction that would conserve water, energy, and natural resources; divert waste from landfills; minimize impacts to existing infrastructure; and promote a healthier environment (County of Los Angeles 2016a).

Los Angeles County Tree Planting Ordinance (Title 22)

On March 29, 2016, the Board of Supervisors adopted the Tree Planting Ordinance that does the following (DRP 2016b):

- Amended Title 22 (Planning and Zoning) of the Los Angeles County Code ("County Code") to establish tree planting requirements for new projects and
- Amended Title 21 (Subdivisions) and Title 22 (Planning and Zoning) of the County Code to repeal drought tolerant landscaping and green building requirements that are now found in Title 31.

The Tree Planting Ordinance, effective April 28, 2016, includes the following requirements:

a. For projects that are primarily residential with 3 or fewer units per lot, a minimum of 2 trees shall be planted on each lot.
b. For projects that are primarily residential with 4 or more units per lot, a minimum of 1 tree shall be planted for every 5,000 square feet of building footprint per lot.
c. For projects that are nonresidential or mixed-use, a minimum of 3 trees shall be planted for every 10,000 square feet of developed lot area.

Trees planted must (1) provide adequate shade; (2) be resistant to local pests and diseases; (3) be non-invasive species; and (4) be appropriate for the planting location (DRP 2016b) pursuant to Section 22.56.2100.

Los Angeles County Roadmap for a Sustainable Waste Management Future.

On April 22, 2014, the Board of Supervisors adopted a motion directing the development of a Roadmap to achieve a Sustainable Waste Management Future for the County unincorporated communities. Accordingly, the Sustainable Waste Management Future Working Group was formed to collectively develop the Roadmap. The intent of the Roadmap is to guide the County in implementing the four strategies identified by the Working Group, which are as follows: (1) Programs and Services, (2) Measuring Results, (3) Facilities and Infrastructure, and (4) Outreach and Education. By implementing these strategies the Roadmap sets to achieve 80 percent diversion from landfills by 2025; 90 percent diversion from landfills by 2035; and 95 percent (or higher) diversion from landfills by 2045. To accomplish these goals, the Working Group identified specific recommended initiatives, which will be expanded in detailed implementation plans. Although the Roadmap does not contain currently enforceable regulations, development under the *Centennial Specific Plan* will comply with any implementation plans once adopted.

5.21.3 – Environmental Setting

Global, National, State, and Regional Contributions to GHG Emissions

Table 5.21-2 compares the magnitude of GHG emissions on the global, national, State, and regional (i.e., Los Angeles County) scales.

TABLE 5.21-2
COMPARISON OF WORLDWIDE GHG EMISSIONS

Area and Data Year	Annual GHG Emissions ($MMTCO_2e$)
World (2012)	46,049
United States (2014)	6,870
California (2013)	459
Los Angeles County, Unincorporated (2010)	8.0
$MMTCO_2e$: million metric tons of carbon dioxide equivalent Source: WRI 2016; USEPA 2016; CARB 2015c; DRP 2015a.	

The U.S. contributes approximately 14.7 percent of worldwide GHG emissions per year; California contributes approximately 1.0 percent; and the unincorporated portion of the County contributes approximately 0.02 percent. CO_2 constitutes approximately 84 to 85 percent of all GHG emissions in the U.S. and California. The primary contributors to California GHG emissions are (1) transportation; (2) electric power production from both in-state and out-of-state sources; and (3) industrial uses. The primary contributors to unincorporated County GHG emissions are (1) building energy (49 percent) and (2) transportation (42 percent). The CCAP forecasts that unincorporated County GHG emissions will increase from 7.98 $MMTCO_2e$ per year in 2010 to 9.06 $MMTCO_2e$ per year in 2020 (DRP 2015a).

California GHG emissions have fallen from about 1.36% of the global total in 1990 to about 0.98% in 2011 (WRI 2016). The annual amount of global $C0_2e$ emissions increased by 12,936 $MtCO_2e$ from 1990 to 2011, or by more than 40% since 1990. For the same period, California's CO_2e emissions increased by only 8.3 $MTCO_2e$ (2%), and declined by approximately 10.7% from 2007 to 2011. Overall, California accounted for only 0.065% of the net global CO_2e emissions increase between 1990 and 2011. Moreover, California emits approximately 50% less CO_2e per capita than the rest of the United States, and far less than locations such as Texas or Canada. In 2011, California emitted 11.4 metric tons CO_2e per capita, whereas the US, Texas, and Canada emitted 22.3, 30.9, and 20.9 metric tons CO_2e per capita, respectively. Indeed, California's 2011 per capita GHG emission rate was on part with Germany (10.8 $MTCO_2e$ per capita), a country widely regarded as a world leader in the development of zero-emission energy sources (WRI 2016).

Project Site GHG Emissions

The Project site is currently undeveloped and used primarily for livestock grazing. Of the 12,323 acres of land comprising the Project site, approximately 10,950 acres (89 percent) are currently used for cattle grazing. Existing GHG emissions from the Project site occur from enteric fermentation (cattle digestive processes), which primarily produces CH_4, and from vehicles used on the property for grazing management. The extensive vegetation on the Project site sequesters CO_2, thereby reducing GHG emissions attributed to the existing condition. A portion of State Route (SR) 138 extends through the Project site, and vehicles traveling that roadway do emit GHGs. However, for the purposes of this analysis, it is

assumed that the existing emissions are not quantified, as they are not associated with activities at the site.

Local Climate Change Effects

The following descriptions of potential adverse effects are taken from the CCAP.

Large increases in global GHG concentrations could have substantial adverse effects on natural and human environments in the unincorporated areas. Current research efforts coordinated through the CARB and other State agencies examine the specific changes to California's climate that will occur as Earth's surface warms. California's *2012 Vulnerability and Adaptation Study*, the State's third major assessment on climate change, examines local and statewide vulnerabilities to climate change and includes new data and projections on climate changes in California. Dr. Alex Hall, from the University of California, Los Angeles (UCLA), in partnership with the Los Angeles Regional Collaborative for Climate Action and Sustainability (LARC), recently published several studies that develop climate change predictions that are specific to the greater Los Angeles area. These studies indicate that if GHG emissions continue to increase globally based on current trends, climate change could impact the natural environment in the following ways:

> **Increases in Ambient Temperatures:** On average, the Los Angeles region is expected to warm 4 to 5°F over land by mid-century. The coasts and oceans will likely warm the slowest, whereas the mountains and deserts will experience more rapid warming. Warming across the region will be greatest in the summer and fall. For the unincorporated areas in particular, UCLA's high emissions modeling scenario predicts that mountain and inland areas may warm up to or greater than 4.5°F, and coastal and valley/urban areas warming up to 3.7 to 3.9°F.
>
> **Increases in Extreme Heat Conditions:** Heat waves and very high temperatures could last longer and become more frequent. The number of extreme heat days is expected to triple in the coastal and central areas; the San Fernando Valley and San Gabriel Valley will witness almost a quadrupling of heat days. The number of extreme heat days in the desert and mountain areas will increase five to six times relative to the current amounts. For the unincorporated areas in particular, UCLA's high emissions modeling scenario predicts a nearly 12-fold increase in the number of heat days.
>
> **Decreased Snowfall and Winter Snowpack:** The region's mountains could see a 42 percent reduction in annual snowfall by mid-century. The winter snowpack is also expected to melt 16 days earlier as a result of rising temperatures. As of March 2014, California is facing a severe drought and the snowpack in the Sierra Nevada is 12 percent of the annual average (DWR 2014). Changes in snowfall could exacerbate drought-like conditions, reducing water supplies and water security for all end users throughout the County.
>
> **Increased Frequency, Intensity, and Duration of Extreme Storms:** Changes in storm events could create conditions that are conducive to air pollution formation,

which further exacerbates air quality issues. Increased winter storm events could also affect peak stream flows and flooding as well as landslides.

Changes in Growing Season and Species Distribution: Changes in growing season conditions could cause variations in crop quality and yield. Plant and wildlife distributions may also be affected by changes in temperature, competition from colonizing species, regional hydrology, sea level, and other climate-related effects.

Rising Sea Levels: Sea levels are expected to steadily rise by mid-century, which could inundate portions of the coastline.

5.21.4 – Project Design Features

Green Development Program

The Project would implement a Green Development Program, included as Appendix 1-B to the *Centennial Specific Plan*. The Green Development Program includes but is not limited to:

- Project features that comply with and implement the CCAP and
- Additional Project features that comply with and implement State and federal GHG reduction mandates and goals.

The Project first applies land use planning principles to create a balanced master-planned community that includes mixed-use neighborhoods where residential, commercial, and other employment-generating uses and institutional/public uses are proximate to each other and connected by a network of pathways to reduce reliance on automobile use and off-site commuting. The bicycle and pedestrian trail system connects community uses such as neighborhood parks, elementary schools, and neighborhood-scale retail to reduce single-occupancy automobile travel for these neighborhood-scale destinations.

The Project then applies infrastructure and building design standards to reduce GHG emissions through energy and water conservation measures. The Project's integrated water resources management approach would (1) minimize water use and maximize water reuse through development of two wastewater reclamation facilities (WRF) that will produce recycled water for landscape irrigation use throughout the Project site and (2) incorporate a variety of water supply sources including State Water Project (SWP) water, banked water, groundwater, and other non-SWP supplies to reduce the GHG emissions associated with water supply delivery.

The Project includes components (e.g., the Mobility Plan, Green Development Program) to conserve and enhance open space, promote transit, and reduce waste. Development within established Significant Ecological Areas would be entirely avoided, thereby minimizing disturbance of high-value biological resources and preserving open space areas that sequester CO_2. As part of the Green Program the Project incorporates a comprehensive waste diversion and recycling program. In order to promote the use of alternative forms of transportation, the Project includes a Transportation Management Association (TMA) that develops strategic linkages with other Antelope Valley/Santa Clarita Valley TMAs or similar

organizations in order to maximize transit efficiencies and services. The TMA's purpose is to coordinate and facilitate transit and rideshare usage to serve as many riders as possible thereby reducing GHG emissions from mobile sources.

Elements of the Green Development Program that would reduce GHG are stated in the project design features (PDF) listed below. The emissions reductions for some PDFs are quantifiable; others are not, but would reduce GHG emissions from the quantified levels and reduce associated GHG emissions impacts. PDFs that demonstrate quantifiable GHG emissions reductions are also stated as Mitigation Measures.

Operational – Energy Efficiency

PDF 21-1 The Green Development Program requires compliance with CALGreen voluntary measure A4.203.1.2.1 for low-rise residential buildings. Therefore, the energy efficiency of these buildings would exceed 2016 Title 24 requirements by 15 percent. Low-rise residential buildings are three stories or less.

PDF 21-2 The Green Development Program requires compliance with CALGreen voluntary measure A5.203.1.2.1 for nonresidential buildings. Therefore, the energy efficiency of nonresidential, hotel, and high-rise residential buildings would exceed 2016 Title 24 requirements by 10 percent. High-rise residential buildings are four stories or more.

PDF 21-3 The Green Development Program requires a minimum of 50 percent of the Project's anticipated electrical energy demand at buildout (i.e. household, business, civic/institutional, recreational, and public facilities) shall be satisfied from on-site renewable energy generation. "Anticipated electrical energy demand" shall be determined on the basis of the anticipated loads for each building as shown in the reports submitted at the time of building permit application pursuant to the Building Energy Efficiency Standards of Title 24 or equivalent. "On-site renewable energy generation" includes, but is not limited to, solar, wind, geothermal, biofuel and hydroelectric systems. These systems shall be installed in connection with the development of one or more of the following: residential units, nonresidential buildings, public buildings, or Specific Plan utility facilities located either within the Specific Plan area or within its immediate vicinity.

PDF 21-4 The Green Development Program requires that <u>all</u> ~~a minimum of 70 percent of~~ public and community pools and spas would be equipped with active solar heating systems where heating is necessary or desired. The applicant for a pool permit shall provide the proposed plan for compliance with this provision prior to obtaining a permit for the pool.

PDF 21-5 The Green Development Program requires that deeds, CC&Rs (Covenants, Conditions and Restrictions), or similar legal documents contain the following requirement: The owners of all single-family and multi-family residential units

shall be required, upon resale, to present to the buyer a written energy audit checklist prepared by a qualified third party at the time the seller provides the buyer with the Real Estate Transfer Disclosure Statement required by Section 1102 et seq. of the *California Civil Code.* The energy audit checklist shall certify that all heating, ventilation, and air conditioning (HVAC) systems, thermostats, appliances, windows and swimming pools (if applicable) are the same as those originally installed or, if changed, otherwise comply with Centennial's Green Development Program. The CC&Rs of the master homeowners association or other applicable association shall require compliance with the provisions of this measure and shall provide notice to individual owners of the resale energy audit checklist requirement. The master homeowners association or other applicable association shall monitor compliance and provide the County with an annual report of compliance with this measure.

PDF 21-6 The Green Development Program requires that deeds, CC&Rs, or similar legal documents contain the following requirement: For nonresidential buildings, within 90 days after the end of the first full calendar year following the issuance of the certificate of occupancy and within 90 days after each 5-year period thereafter, the owner or tenant in possession thereof shall submit to the master commercial owners association or other applicable association a report prepared by the owner or a qualified, independent third party that evaluates whether all major building systems such as heat furnace, air conditioner, and other mechanical fixtures are working within the design standards established for each system. The master commercial owners association or other applicable association shall monitor compliance and provide the County with an annual report of compliance with this measure.

PDF 21-7 The Green Development Program requires builders to install energy efficient major appliances and HVAC systems which meet the more stringent of applicable California Energy Commission (CEC) requirements or ENERGY STAR requirements. Major appliances subject to this requirement include dishwashers, clothes washers, refrigerators, and room air conditioners.

PDF 21-8 The Green Development Program requires that the Project's wastewater reclamation facilities (WRF) will ~~include equipment to~~ capture and reuse biogas for energy production.

Operational – Vehicle Trip and Vehicle Miles Traveled Reductions

PDF 21-9 The Green Development Program requires that the Project establish a Transportation Management Association (TMA) that develops strategic linkages with other Antelope Valley/Santa Clarita Valley TMAs or like organizations in order to maximize transit efficiencies and services. The TMA's purposes are to coordinate and facilitate transit and rideshare usage to serve as many riders as possible; to promote multi-modal transportation services and options; and to reduce resident and employee use of single-occupancy

automobiles for off-site commuting, and for internal travel within the Specific Plan. PDF 21-9 is required for implementation through MM 10-1, detailed in Section 5.10, Traffic, Access, and Circulation.

PDF 21-10 The Centennial Affordable Housing Implementation Plan (see Appendix 3-H of the Centennial Specific Plan, which is in Appendix 4.0-A of the EIR) will be adopted in conjunction with the Specific Plan, which includes dedication of a minimum of ten percent of all homes in Centennial communities that permit housing, with the exception of the lowest density area (Community 8-2) will be affordable. The California Air Pollution Control Officers Association's (CAPCOA's) 2010 document entitled *Quantifying Greenhouse Gas Mitigation Measures* identifies affordable housing as a quantifiable measure for reducing GHG emissions as it allows lower income families to live closer to jobs centers.

PDF 21-11 The Centennial Specific Plan's Green Development Program requires the installation of one 208/240 volts of alternating current (VAC) receptacle that may be used for charging electric vehicles in each detached and attached single-family residence in a manner consistent with 2016 CALGreen Code Voluntary Tier 1 Section A4.106.4.1.. The installation shall comply with requirements of Section 4.106.4.1 of the 2016 CALGreen Code, or the most applicable code at the time of construction.

PDF 21-12 The *Centennial Specific Plan's* Green Development Program requires each applicant to provide plans and specifications to the County demonstrating compliance with the Electric Vehicle Supply (EVS) charging station measures specified in MM 11-4. If and to the extent subsequently approved by the County, compliant with state laws, and resulting in no new significant impacts to the environment following County review and approval, EVS charging stations may be replaced by "alternative energy fueling stations" which may include other types of electric vehicle charging technology (e.g., operating at higher or lower voltages), or alternative vehicular fuel technology that results in zero or near zero (as defined by CARB) GHG emission such as hydrogen fuel cells, biofuels, or other qualifying fuel technologies. An electric charging station shall allow for simultaneous charging of two electric vehicles. ~~for an applicable construction permit to install "alternative energy fueling stations" as listed below. An "alternative energy vehicle fueling station" is a 208/240 VAC electrical vehicle charging station (allowing simultaneous charging of two or more vehicles) or a station providing another new or improved technology (e.g. compressed natural gas [CNG] and hydrogen fuel cell) that provides refueling for vehicles that do not use fossil fuel.~~

- Business Park and Institutional land use designations shall provide a minimum of one alternative energy vehicle fueling station on site for the first 50,000 square feet of usable floor space and additional alternative energy vehicle fueling stations for each additional 50,000 square feet of usable floor space thereafter.

- Multi-family residential buildings of at least seventeen ~~20~~ 17 residential units shall provide a minimum of one alternative energy vehicle fueling station for the first seventeen (~~20~~ 17) residential units and an additional alternative energy vehicle fueling station for each additional seventeen (~~20~~17) residential units thereafter.
- The Town Center and each Village Center shall provide a minimum of one alternative energy vehicle charging station.
- Designated Transit Hubs shall provide a minimum of one alternative energy vehicle charging station.

PDF 21-13 The Green Development Program requires that, prior to the issuance of each nonresidential construction permit, the Project Applicant/Developer shall provide plans and specifications to the County demonstrating that the following features have been incorporated into the building designs:

- Bicycle parking spaces at a rate of 5 percent of minimum required vehicle parking spaces for nonresidential land uses or as required by Section 22.52.1225B of the County Code, whichever is more stringent
- For new nonresidential buildings with over 10 tenant-occupants, provide secure bicycle parking spaces at a rate of 5 percent of tenant parking being added, with a minimum of 1 space. Acceptable parking facilities shall be conveniently reached from the street and may include, but not be limited to:
    - Covered, lockable enclosures with permanently anchored racks for bicycles.
    - Lockable bicycle rooms with permanently anchored racks.
    - Lockable, permanently anchored bicycle lockers.

PDF 21-14 The Green Development Program requires that prior to the issuance of an applicable construction permit for each residential building permit, the Project Applicant/Developer shall provide plans and specifications to the County demonstrating that the following features have been incorporated into the building designs or specifications.

- Visitor parking shall include preferentially located parking spaces for ~~alternative-fueled~~ electric vehicles.
- Bicycle parking shall be provided as specified in Section A4.106.9, Residential Voluntary Measures, of the CALGreen Code or as required by Section 22.52.1225B of the County Code, whichever is more stringent.

PDF 21-15 The Green Development Program requires that prior to issuance of an applicable construction permit for each parking structure and parking lots

with 20 or more parking spaces that serve uses other than residential or nonresidential buildings (e.g., trailhead, park), and parking structures and parking lots that serve multifamily residential buildings with 17 or more multifamily units, the Project Applicant/Developer shall provide plans and specifications to the County demonstrating that the following features have been incorporated into the parking facility:

- The parking facility shall include a minimum of five percent preferentially located parking spaces for ~~alternative-fueled (~~electric~~, natural gas, or similar low-emitting technology)~~ vehicles.
- Five percent of ~~T~~the total number of parking spaces provided in the parking facility, but in no case less than one, shall be Electric Vehicle Parking Spaces (EV Spaces), as defined in CALGreen Code Section 202, capable of supporting future Electric Vehicle Supply Equipment (EVSE), as defined in CALGreen Code Section 202~~include at least one electric vehicle charging station. Electrical lines shall be designed and sized to add additional charging stations for up to three percent of the total parking spaces when a demand is demonstrated~~. Calculations for the required number of EV Spaces shall be rounded up to the nearest whole number and ~~T~~the design and installation of each EV space shall be consistent with Section A4.106.8.2, Residential Voluntary Measures, and Section 4.106.4.2, of the CALGreen Code.
- For residential parking facilities, bicycle parking shall be provided as specified in Section A4.106.9, Residential Voluntary Measures, of the CALGreen code or as required by Section 22.52.1225B of the County Code, whichever is more stringent.

PDF 21-16 The Green Development Program requires that the Project Applicant/Developer provide:

- Internet infrastructure and high-speed broadband access to facilitate telecommuting.
- A community intranet (or similar) with access for homeowners associations; interest groups; local event scheduling; schools, library, carpool and transit services; and other on-site entertainment and amenities reduce the need for people to use automobile travel to obtain the information that is provided.

Compliance shall be required prior to the issuance of building permit for the 1,000th residential unit.

Operational – Water Conservation to Reduce Emissions Associated with Water Supply, Treatment, and Distribution

PDF 21-17 The Green Development Program requires each applicant for an applicable construction permit for a nonresidential or multi-family building to install recycled water infrastructure to serve common areas for these facilities, except where prohibited by law. To the extent recycled water is produced within the Project and available, recycled water shall be used for landscape irrigation within those common areas. Compliance with these measures shall be established prior to the issuance of a building permit for nonresidential and multi-family facilities and at the time of County approval of final landscaping plans submitted by the applicant after final map recordation for homeowners association common areas. Covenants, conditions and restrictions shall require the owners of such common areas to maintain, repair and replace irrigation systems and plantings in accordance with County approved plans.

PDF 21-18 The Green Development Program requires each applicant for an applicable construction permit for a nonresidential building to install indoor plumbing fixtures and fixture fittings that would reduce the overall use of potable water within the building by 12 percent, consistent with 2016 CALGreen Tier 1 nonresidential voluntary measures as prescribed in Section A5.303.2.3.1 of the code.

PDF 21-19 The Green Development Program requires each applicant for an applicable construction permit for a single or multi-family residential building to install kitchen faucets and appliances that comply with 2016 CALGreen code residential voluntary measures specified in Sections A4.303.1 and A4.303.3 of the code.

PDF 21-20 Implement MM 18-1, which requires water rates to be based on the assigned water budget for each parcel, to assure that outdoor landscaped areas for single-family and multi-family homes do not exceed the assigned outdoor water budget for the parcel through excessive watering or excessive turf planting.

Construction – Vehicle Emissions Reduction

PDF 21-21 The Green Development Program requires that, prior to the issuance of each construction permit, the Project Applicant/Developer shall require in contract specifications that contractors set goals to limit unnecessary construction equipment idling to three minutes and provide a program to encourage equipment operators to achieve the three-minute goal. This requirement exceeds State regulations (*California Code of Regulations* [CCR], Title 13, 2449[d][2]) that limit idling to five minutes.

5.21.5 – Threshold Criteria

CEQA Thresholds

The following significance threshold criteria are derived from the County of Los Angeles Environmental Checklist and track the thresholds recommended in the State CEQA Guidelines as amended by the California Natural Resources Agency (CNRA) (CNRA 2009a). The Project would result in a significant impact if it would:

Threshold 21-1 Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.

Threshold 21-2 Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Neither the County's Environmental Checklist nor the State CEQA Guidelines prescribe specific methodologies and significance criteria for determining the significance of GHG emissions impacts. The State CEQA Guidelines emphasize the lead agency's discretion to determine the appropriate thresholds consistent with the manner in which other impact areas are handled in CEQA. CEQA cases have upheld local agencies discretion to determine the significance of GHG emissions.

As with all determinations made in preparing an EIR, pursuant to Section 15064.7(b) of the State CEQA Guidelines, even without the express discretion as is the case for GHG, the substantial evidence standard applies to an agency's determination of the significance of an impact. Under Section 15384, substantial evidence is defined as "facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts". Under the substantial evidence standard, even if there is other information that supports a contrary conclusion, or a disagreement among experts as to the methodology or significance criteria, so long as the agency decision is supported by substantial evidence, it will be upheld even if there is other substantial evidence or expert opinions to the contrary (California 1988, p. 407). As such, an agency determination of significance is upheld so long as it is based on substantial evidence.

Determining how to analyze the significance of a project's climate change impacts poses a difficulty for lead agencies. The science in this area is evolving constantly. At the same time, local agencies do not specialize in this area, and there are currently no local, regional, or statewide significance criteria for determining whether a mixed-use residential development in the County of Los Angeles has a "significant" impact on climate change. Although the CNRA has adopted the CEQA Amendments developed by OPR pursuant to SB 97, as discussed above, the CEQA Amendments pose two questions that agencies should evaluate, they leave considerable discretion to lead agencies to develop appropriate methodologies and significance criteria in evaluating these questions. As such, the County's analysis of GHG significance is a good faith effort to consider all potential significance criteria under the current state of the guidance, policy, and regulation.

Under Threshold 21-1, this impact analysis evaluates consistency with regulatory programs designed to reduce GHG emissions and that contribute to the achievement of AB 32's goals as the primary significance criterion. In addition, for informational purposes, this impact analysis also evaluates the Project's estimated emissions as compared to the Antelope Valley Air Quality Management District (AVAQMD) significance thresholds for impacts related to GHG emissions, as well as certain significance thresholds for impacts related to GHG emissions proposed by staff of South Coast Air Quality Management District (SCAQMD), but not adopted by SCAQMD Board.

Under Threshold 21-2, this impact analysis evaluates consistency with the Los Angeles County Community Climate Action Plan (CCAP) and consistency with SCAG's RTP/SCS as primary significance criteria. For informational purposes, this impact analysis also evaluates consistency with the GHG emissions-related goals and policies of the *Antelope Valley Area Plan* (AVAP).

Therefore, this impact analysis utilizes the "potential compliance pathways" described by the Court in the *Newhall* decision, namely compliance with a local climate action plan and/or other geographically specific GHG emission reduction plans (i.e., the CCAP, the SCAG RTP/SCS, and, for informational purposes, the AVAP); compliance with regulatory programs designed to reduce GHG emissions and that contribute to the achievement of AB 32's goals; and, for informational purposes, consistency with numerical GHG significance thresholds (AVAQMD and staff-proposed SCAQMD significance thresholds).

As discussed in Section 5.21.5, following the Supreme Court's decision in *Newhall*, on November 2016, the CDFW released a draft Additional Environmental Analysis (AEA) intended to address that agency's CEQA compliance obligations at issue in that case. (CDFW 2016) As described in the AEA, the *Newhall* project applicant (Five Point LLC) voluntarily modified its project and proposed to achieve "net zero" GHG emissions for the project with the implementation of 13 mitigation measures described in the AEA. On that basis, the AEA concludes that, since the *Newhall* project will result in no net increase in GHG emissions, it would not contribute to cumulative GHG emissions influencing global climate change and thus would not conflict with any plan, policy, or regulation adopted for the purpose of reducing the emission of GHGs. Consequently, the AEA concludes that project GHG and climate change impacts would be less than significant (CDFW 2016, pp. 1-18).

It is important to note that the *Newhall* AEA does not establish a new significance criteria of any kind, much less a "net zero" GHG threshold under CEQA. In fact, agencies that have considered a zero threshold approach have rejected it. For example, despite having been urged to propose a zero-emissions CEQA threshold in its proposed amendments to the CEQA guidelines regarding the analysis of GHG emissions released in April 2009 (Proposed Guidelines), the state Office of Planning and Research (OPR) responded in its *Initial Statement of Reasons for Regulatory Action: Proposed Amendments to the State CEQA Guidelines Addressing Analysis and Mitigation of Greenhouse Gas Emissions Pursuant to SB 97* that Section 15064.4(b)(1) of the Proposed Guidelines is not intended to suggest a zero emission threshold, as CEQA does not include a "one molecule" rule. (CRNA 2009a, p. 20; *see also*, SJVAPCD 2009b, p. 34 [explaining that OPR's Proposed Guidelines confirm that a lead

agency is not responsible for wholly eliminating all GHG emissions from a project]). In addition, in its report to the Ventura County Air Pollution Control Board on GHG significance thresholds, staff reported that "[n]ot a single California air pollution agency is considering either of the first two approaches for GHG significance thresholds [a "no threshold approach" or a "zero threshold approach"].

Moreover, with respect to the *Newhall* AEA, the applicant imposed a "net zero emissions" program for GHG; it was not imposed under CEQA by the State of California, which is acting as the lead agency, and unlike a local city or county has direct statutory and regulatory authority to reduce GHG emissions from all sectors of the California economy, including most notably the major sectors producing GHG emissions (electricity production, transportation fuels, and large-scale industrial facilities such as refineries and cement plants). In the *Newhall* AEA, for example, CARB and Cal/EPA were directly involved in – and contemporaneously produced a letter affirming the achievement of – the *Newhall* applicant's "net zero" voluntary proposal. With respect to the project analyzed in this EIR, the County's land use jurisdiction does not extend to having jurisdiction or control over the vast majority of GHG emissions within the state. With respect to consideration of land use project, particularly large-scale projects, this EIR considers – and the Project complies with – SB 375, which is the state's statutory program for ensuring GHG reductions from land use and transportation projects, as discussed in Section 5.21.6.

5.21.6 – Environmental Impacts

On-Site Impacts

Threshold 21-1 **Would the proposed project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?**

Compliance with Regulatory Programs Designed to Reduce GHG Emissions and Project GHG Emissions

In addition to complying with the policies and regulations of the CCAP (discussed in Table 5.21-11 below), the Project will incorporate the project design features and comply with applicable regulations designed to reduce GHG emissions, thus contributing to the achievement of AB 32's goals. Some regulatory measures were promulgated prior to or independently of AB 32, and others were identified in CARB's 2008 Climate Change Scoping Plan and promulgated subsequent to approval of the Scoping Plan. A full list and description of these project design features and regulatory programs are presented in detail above in Sections 5.21.4 and 5.21.2, respectively. Following the Newhall Court's direction, the following highlight key project design features and regulatory programs, organized by emission source category, in order to clarify which measures apply to each emission source, thus contributing to the reduction of GHG emissions associated with that source. After a brief discussion of the methodology used to calculate the Project's GHG emissions, this analysis is organized by the following emissions source categories:

- Construction emissions

- Vegetation changes
- Annual operational emissions
    - Area sources (lawn mowers; natural gas fire places)
    - Energy use
    - Water supply, treatment, and distribution
    - Solid waste
    - Mobile source

Calculation Methodology

GHG emissions were calculated by using the California Emissions Estimator Model (CalEEMod) Version 2016.3.1 as described in Section 5.11, Air Resources. In addition to the construction and operational inputs described in Section 5.11, Air Resources, the GHG emissions analysis includes the following input data or estimates:

- Electrical energy use
- Water use – indoor and outdoor, potable and recycled
- Solid waste generation
- Carbon sequestration loss from vegetation removal and gain from planting of trees
- Renewable generation of 50 percent of the Project's electrical energy use as specified in PDF 21-3, as implemented by MM 21-1.
- For the calculation of GHG emissions for the electrical energy used by the Project, including direct Project consumption of electricity and the electricity used to supply, distribute, and treat water used by the Project, it was assumed that Southern California Edison (SCE) would achieve the 50 percent renewable energy goal for 2030 established by EO B-30-15 and SB 350. It was not assumed that renewable energy would exceed 50 percent by 2035. (Note that under the modeling methodology, this 50 percent renewable energy assumption was made only for electricity consumption, and did not extend to transportation, etc.)
- Energy efficiency was assumed to exceed the 2016 code requirements as specified in PDF 21-1 and PDF 21-2, as implemented by MM 21-2 and 21-3, respectively. No credit was taken for additional energy efficiency that may be required by the 2019 and subsequent codes.

One-Time Emissions

Construction Emissions

The major construction phases included in this analysis are as follows:

- **Demolition** involves tearing down of buildings or structures and removal of asphalt and concrete parking areas and walkways.

- **Site Preparation** involves clearing vegetation (grubbing and tree/stump removal) and stones prior to grading.
- **Grading** involves cut and fill of land to ensure the proper base and slope for the construction foundation.
- **Building Construction** is the construction of structures and buildings.
- **Architectural Coating** is the application of coatings to both the interior and exterior of buildings or structures
- **Paving** is the laying of concrete or asphalt such as in parking lots or roads.

These phases would occur in connection with anticipated construction at the Project site and related off-site Project impact areas, as described in Section 4.0, Project Description. GHG emissions from these construction phases are largely attributable to fuel use from construction equipment and worker commuting. Additional indirect GHG emissions would result from the supply and delivery of water used during site grading.

Construction GHG emissions were calculated by using CalEEMod Version 2016.3.1 as described in Section 5.11, Air Resources. Specific inputs to CalEEMod include but are not limited to the start and finish dates of construction phases; inventories of construction equipment to be used during each phase; areas to be paved; and areas to be painted. Output emissions data are provided for off-road equipment and on-road vehicles.

Once construction begins (in Year 1), it will proceed continuously for approximately 20 years, with full buildout completed after 20 years. Construction emissions are calculated for the following construction activities: grading, building, paving, and architectural coating (painting).[3421] The rate of construction would vary with a variety of factors including, but not limited to, market demand, weather, and as-found site conditions. The estimation of the quantities of grading, building, paving, and painting on a year-by-year basis for a 20-year project would be highly speculative. Therefore, the construction effort is initially evaluated assuming that each construction activity would be spread equally over the applicable years. Additionally, as further explained below, construction emissions are evaluated for a peak grading year.

Grading would occur from Year 1 through Year 18. Preliminary grading engineering design indicates that approximately 127 million cubic yards (mcy) of earth would be moved for the total Project. Based on the preliminary grading estimates, the average daily grading quantity over the 18 years of grading would be approximately 26,500 to 36,500 cubic yards (cy), depending on the number of days of grading. For a conservative estimate, it is assumed that grading would be limited by weather and other factors to 200 days per year, and the average daily grading quantity would be 36,500 cy. Cut and fill would be balanced on the Project site and no off-site export or import is anticipated. Soil movement within the site would be by scraper. Equipment used for the average year grading analysis is shown in Table 5.21-3

[3421] Emissions modeling often includes demolition and site preparation (clearing and grubbing) activities. Demolition required for the proposed Project would be negligible. Clearing and grubbing would be predominantly grassland, and would occur concurrently with grading.

Further below in Table 5.21-10, all summary of all Project-related GHG emissions are presented.

TABLE 5.21-3
GRADING, BUILDING, PAVING, AND ARCHITECTURAL COATING EQUIPMENT FOR AVERAGE YEAR EMISSIONS ESTIMATES

Equipment Type	Number of Equipment
Grading	
Scrapers	10
Dozers	7
Compactors	2
Water trucks	2
Graders	1
Building	
Cranes	4
Forklifts	12
Tractor/Loader/Backhoes	12
Welders	4
Generator Sets	4
Paving	
Paving Machine	1
Roller	3
Architectural Coating	
Compressors	4

For the purposes of the GHG modeling assumptions, the Project construction is assumed to begin in 2016, with buildout complete in 2035, although the actual start of construction and buildout are likely to occur later than 2016 and 2035, respectively. The 2035 buildout date is consistent with the Project traffic impact analysis (see Section 5.10, Traffic, Access, and Circulation) and also with the CalEEMod model, which does not include on-road emissions factors beyond 2035. This is a conservative approach; if the actual start of construction occurs later than 2016 and buildout occurs later than 2035, both the construction equipment fleet and on-road vehicles are assumed to be "cleaner" than would be the case if construction starts in 2016 and buildout occurs in 2035, as described CARB's 2016 Mobile Source Strategy. This is so because such later model vehicles will be subject to more stringent emission controls and fuel standards and thus generate less unit emissions with each future year. As such, assuming development of the Project site occurs sooner than is likely to occur provides a more conservative assessment of construction GHG emissions.

It is estimated that construction grading would use 9,744 acre-feet (3,176 million gallons) of water for dust control during the estimated 20-year construction period. This estimation accounts for climatic conditions (i.e., dry and windy conditions) in the Project area. The water would come from previously imported water, banked, and stored north of the Project

site. GHG emissions associated with this water use were calculated using energy data from CAPCOA's 2010 publication, *Quantifying Greenhouse Gas Mitigation Measures* and the SCE GHG intensity factor for 2025 (CAPCOA 2010).

The estimated Project construction GHG emissions for the Project's 20-year construction period are estimated at 134,692 $MTCO_2e$. CalEEMod data for construction emissions are included in Appendix 5.11-A.

Annotation 6:

As shown in Updated GHG Report Table 1 (see Annotation 2), Project GHG emissions attributable to construction activities in the Updated GHG Calculations are equal to the DEIR Quantified GHG Emissions – i.e., 4,490 $MTCO_2e/yr$.[1] As explained in Updated GHG Report Section 2.5, *Other Emissions*, for construction source GHG emissions, MM 11-2 contributes to emission reductions for air quality purposes, but does not directly contribute to GHG emissions reductions.[2] Project related construction emissions were conservatively assumed to be diesel/gasoline and do not include any GHG emission reductions for electrically powered construction equipment.[3]

1. Updated GHG Report at 3.
2. Ibid at 9.
3. Ibid.

Regulatory Requirements

SCAQMD Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Thresholds. Because construction activity impacts are relatively short in duration, they contribute a relatively small portion of the total lifetime GHG emissions of a project. In addition, GHG emissions-reduction measures for construction equipment are relatively limited. Therefore, in its *Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Thresholds*, the SCAQMD recommends that construction emissions be amortized over a 30-year project lifetime so that GHG reduction measures will address construction GHG emissions as part of the operational GHG reduction strategies (SCAQMD 2008). That method is used in this analysis. Emissions generated during the operational phase of the Project are considered in addition to the amortized construction phase emissions.

USEPA and NHTSA CO_2 Standards. The USEPA and NHTSA have adopted standards for CO_2 emissions and fuel consumption, respectively, tailored to each of three main vehicle categories: combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles. According to USEPA, this program will reduce GHG emissions and fuel consumption for affected vehicles by 6 percent to 23 percent.

CARB Airborne Toxic Control Measures and Emission Standards. CARB adopted an airborne toxic control measure to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to diesel PM and other toxic air contaminants. The measure applies to diesel-fueled commercial vehicles with gross vehicle weight ratings greater than 10,000

pounds that are licensed to operate on highways. This measure also does not allow diesel-fueled commercial vehicles to idle for more than five minutes at any given time. In addition to limiting exhaust from idling trucks, CARB promulgated emission standards for off-road diesel construction equipment such as bulldozers, loaders, backhoes, and forklifts, as well as many other self-propelled off-road diesel vehicles. This regulation aims to reduce emissions through installation of diesel particulate filters and encouraging the replacement of older, dirtier engines with newer emission-controlled models. Implementation is staggered based on fleet size, with the largest operators beginning compliance in 2014.

Title 24 Green Building Standards Code. The 2013 California Green Building Standards Code (24 CCR Par 11), also known as the CALGreen Code, contains mandatory requirements aimed to reduce construction waste; make buildings more efficient in the use of materials and energy; and reduce environmental impact during and after construction. For example, projects must recycle and/or salvage for reuse a minimum of 50 percent of nonhazardous construction and demolition debris or meet local ordinance, whichever is more stringent (Section 5.408.3). In addition, 100 percent of trees, stumps, rocks and associated vegetation and soils resulting primarily from land clearing shall be reused or recycled (Section 5.408.4).

Annotation 7:

The 2016 CalGreen Code became effective on January 1, 2017. As with the 2013 CalGreen Code, the 2016 code contains mandatory requirements aimed to reduce construction waste, make buildings more efficient in the use of materials and energy, and reduce environmental impact during and after construction. For example, under the 2016 standards, projects must recycle and/or salvage for reuse a minimum of 65 percent of nonhazardous construction and demolition debris or meet local ordinance, whichever is more stringent (Section 4.408.1).

Los Angeles Green Building Standards Code. Title 31 of the Los Angeles County Code of Ordinances was adopting in 2013 in response to the mandates set forth in the CALGreen Code. The purpose of Title 31 is to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact, or positive environmental impact, and encouraging sustainable construction practices in planning and design; energy efficiency; water efficiency and conservation; material conservation and resource efficiency; and environmental air quality.

Antelope Valley Area Plan (AVAP). Policy COS 17.1 promotes green building techniques for the construction and operation of public and private buildings in the unincorporated Antelope Valley. Policy COS 17.9 requires reduction, reuse, and recycling of construction and demolition debris.

Project Design Features

PDF 17-2. PDF 17-2 of Section 5.17, Other Services, states that the Project has committed to diverting from landfill disposal 100 percent of soil during grading activities, and at least ~~70~~

75 percent of nonhazardous construction and demolition waste, which exceeds the 65 percent diversion requirement with the Tier I voluntary measure in Section A5.408.3.1 of the California Green Building Standards Code. This goal also exceeds the 50 percent reduction required by Section 20.87.040 of the County Code and Sections 4.408.5/5.408.1.4 of the CALGreen Code. PDF 17-2 is required for implementation through MM 17-9.

PDF 21-21. The Green Development Program requires that, prior to the issuance of each construction permit, the Project Applicant/Developer shall require in contract specifications, that contractors set goals to limit unnecessary construction equipment idling to three minutes and include a program to encourage equipment operators to achieve the three-minute goal.

As the Project will incorporate these project design features and must comply with these applicable regulations imposed by law, the Project would contribute to the achievement for AB 32's goals related to construction emissions.

PDF 21-21 is required for implementation through MM 21-4.

Vegetation Changes

Permanent vegetation changes that would occur as a result of Project development constitute a change in the carbon sequestration capacity of the Project site.

The loss of vegetation would occur concurrently with construction. Therefore, the increase in GHG emissions attributable to the loss of carbon sequestration is also amortized over 30 years. However, the reduction in GHG emissions resulting from the planting of new trees would occur more slowly and this reduction is conservatively amortized over 100 years in accordance with IPCC recommendations.

The removal of an estimated 6,416 acres of grassland and other vegetative covers on the Project site during construction would result in an estimated reduction in current levels of sequestration of 27,653 $MTCO_2$ as shown in Table 5.21-4. The planting of an estimated 35,123 new trees, as required by the adopted County Tree Planting Ordinance would result in an estimated long-term sequestration of 24,867 $MTCO_2e$. Therefore, in total the Project would result in an overall reduction in the amount of carbon sequestration on the Project site, resulting in an overall increase in GHG emissions of 2,786 $MTCO_2$ (27,653–24,867 $MTCO_2$). A summary of all Project-related greenhouse gas emissions is presented in Table 5.21-10 later in this section.

TABLE 5.21-4
VEGETATION CHANGE GREENHOUSE GAS EMISSIONS

Type of Vegetation	Acres in Current Condition	Acres in Buildout Condition	Net Change	GHG Emissions $MTCO_2$
Grassland	6,416[a]	0	-6,416 acres	+ 27,653
Annual Increase in CO_2 over 30 year Amortization				**+922**
Type of Tree	**Replacement Trees in Current Condition**	**Replacement Trees in Buildout Condition**	**Net Change**	
Miscellaneous	0	35,123	+35,123 trees	-24,867
Annual Decrease in CO_2 over 100 year Amortization				**-249**

GHG: greenhouse gas; $MTCO_2e$: metric tons of carbon dioxide

Annotation 8:

As shown in Updated GHG Report Table 1 (see Annotation 2), Project GHG emissions attributable to vegetation change in the Updated GHG Calculations are 565 $MTCO_2e$/yr, as compared to the 673 $MTCO_2e$/yr in the DEIR Quantified GHG Emissions (i.e. from DEIR Table 5.21-4, above, 922-249 = 673), which represents a reduction of -108 $MTCO_2e$/yr.[1] As discussed in Updated GHG Report Section 2.5, *Other Emissions*, MM 7-11 and MM 7-12 (which require restoration of impacted woodlands and jurisdictional drainages pursuant to County and regulatory agency permit requirements), and MM 21-20 (landscaping requirements), contribute to quantified vegetation emission reductions for the Updated GHG Calculations.[2] MMs 4-4, 7-1, 7-13, and 7-19 support the implementation and management of these quantified MMs, but were not directly quantified in the Updated GHG Report.[3]

1. Updated GHG Report at 3.
2. Ibid at 9.
3. Ibid.

Regulatory Requirement

Los Angeles County Tree Planning Ordinance. On March 29, 2016, the Board of Supervisors adopted the Tree Planting Ordinance, effective April 28, 2016, includes the following requirements:

a. For projects that are primarily residential with 3 or fewer units per lot, a minimum of 2 trees shall be planted on each lot.

b. For projects that are primarily residential with 4 or more units per lot, a minimum of 1 tree shall be planted for every 5,000 square feet of building footprint per lot.

c. For projects that are nonresidential or mixed-use, a minimum of 3 trees shall be planted for every 10,000 square feet of developed lot area.

Trees planted must (1) provide adequate shade; (2) be resistant to local pests and diseases; (3) be non-invasive species; and (4) be appropriate for the planting location (DRP 2016b).

Annual Operational Emissions

Emissions from mobile and area sources and indirect emissions from energy and water use, wastewater, and waste management, would occur every year after buildout. This section identifies operational GHG emissions.

The proposed Project incorporates elements that reduce Project-generated emissions during operation. In addition, the Project would be required to comply with applicable federal, State, and local rules and regulations to further reduce long-term operational emissions. A wide range of regulatory measures have been enacted through legislation or promulgation of regulations (see Section 5.21.2) that would assist with the reduction of GHG emissions associated with the proposed Project, both directly and indirectly. Some measures were promulgated prior to or independently of AB 32, and others were identified in CARB's 2008 Climate Change Scoping Plan and promulgated subsequent to approval of the Scoping Plan. These measures were evaluated and re-emphasized in the First Update to the Scoping Plan. Project elements have been incorporated to further reduce GHG emissions associated with operation. A discussion of the regulatory measures and Project elements to reduce Project-generated GHG emissions follows under each emissions source.

Area Sources

The area source GHG emissions included in this analysis result primarily from natural gas fireplaces with additional emissions from landscaping-related fuel combustion sources, such as lawn mowers. GHG emissions due to natural gas combustion in buildings other than from fireplaces are excluded from area sources since they are included in the emissions associated with building energy use. Emissions were calculated with CalEEMod. The input for fireplace emissions is specified in PDF 11-2 in Section 5.11, Air Resources, which limits fireplaces to a maximum of 13,954 natural gas fireplaces and no wood-burning fireplaces. Landscape maintenance emissions are based on Project land use data. The Project's area source GHG emissions are estimated at 11,297 $MTCO_2e$ per year, as shown in Table 5.21-5. Further below in Table 5.21-10, all summary of all Project-related greenhouse gas emissions are presented.

TABLE 5.21-5
AREA SOURCE GREENHOUSE GAS EMISSIONS

Source	Emissions ($MTCO_2e$/yr)
Fireplaces (Hearth)	11,056
Landscape maintenance	240
Total	**11,297**

$MTCO_2e$/yr: Metric tons of carbon dioxide equivalent per year
Total does not add due to rounding
Emissions calculations can be found in Appendix 5.11-A.

Annotation 9:

As shown in Updated GHG Report Table 1 (see Annotation 2), Project GHG emissions attributable to area emissions in the Updated GHG Calculations are 11,223 $MTCO_2e$/yr, as compared to the 11,297 $MTCO_2e$/yr in the DEIR Quantified GHG Emissions, which represents a reduction of -74 $MTCO_2e$/yr.[1] As discussed in Updated GHG Report Section 2.5, *Other Emissions*, MM 11-3 related to fireplace restrictions and reductions associated with the electrification of landscaping equipment supports GHG reductions of -74 $MTCO_2e$/yr.[2]

1. Updated GHG Report at 3.
2. *Ibid* at 9.

Regulatory Requirements

SCAQMD Rule 445. SCAQMD Rule 445 requires the use of natural gas to power all cooking stoves and fireplaces.

As the Project must comply with this applicable regulation imposed by law, the Project would contribute to the achievement for AB 32's goals related to area sources.

Energy Use

GHGs are emitted from buildings as a result of activities for which electricity and natural gas are typically used as energy sources. Combustion of any type of fuel emits CO_2 and other GHGs directly into the atmosphere; these emissions are considered direct emissions associated with a building. GHGs are also emitted during the generation of electricity from fossil fuels; these emissions are considered to be indirect emissions. The CalEEMod default natural gas use and emissions calculations are modified by application of the 2016 State Energy Efficiency Standards for Residential and Nonresidential Buildings, PDF 21-1 and PDF 21-2. PDF 21-1, and PDF 21-2 commit the Project to comply with CALGreen voluntary Tier 1 measures to exceed the 2016 code for residential and nonresidential buildings, respectively. The combined effect is a 32.4 percent reduction from the CalEEMod base data for Title 24 natural gas and electricity uses. The SCE GHG intensity factor for 2030 was used based on the SB 350 requirement for 50 percent renewable power by 2030. The carbon intensity factor was not extrapolated to 2035. Therefore, if SCE power content is greater than 50 percent in 2035, the Project's GHG emissions would be less than calculated. The Project's estimated 2035 GHG emissions from the direct burning of natural gas and the indirect generation of electricity are 49,412 $MTCO_2e$ per year as shown in Table 5.21-6. Further below, in Table 5.21-9, a summary of all Project-related greenhouse gas emissions is presented.

TABLE 5.21-6
ENERGY USE AND GREENHOUSE GAS EMISSIONS

Land Use*	Energy Use		GHG Emissions ($MTCO_2e$/yr)		
	Electricity (MWh/yr)	Natural Gas (MBTU/yr)	from Electricity Use	from Natural Gas Use	Total
Elementary School	1,834	4,958	312	266	578
General Light Industry	1,007	2,620	171	141	312
Government (Civic Center)	9,219	11,280	1,566	606	2,172
Health Club	689	1,792	117	96	213
High School	1,273	3,442	216	185	401
Office Park	46,430	49,430	7,888	2,654	10,542
Regional Shopping Center	6,465	1,318	1,098	71	1,169
Single-Family Housing	59,030	340,900	10,028	18,300	28,328
Apartments Mid Rise	11,060	71,130	1,879	3,818	5,697
Total	**137,007**	**486,870**	**23,275**	**26,137**	**49,412**

$MTCO_2e$/yr: Metric tons of carbon dioxide equivalent per year; MWh/yr: megawatt hours per year; MBTU/yr: million British thermal units per year

* Land use categories shown are CalEEMod standard names. "Health Club" is Project "Recreation/Entertainment"

Some totals do not add due to rounding.

Emissions calculations can be found in Appendix 5.11-A.

Annotation 10:

Updated GHG Report Table 2, below, describes the changes in electricity and natural gas demands and emissions as between the DEIR Quantified GHG Emissions (as shown in Table 5.21-6) and the Updated GHG Calculations:

UPDATED GHG REPORT TABLE 2
ELECTRICITY AND NATURAL GAS DEMAND AND GHG EMISSIONS

	Energy Use		GHG Emissions ($MTCO_2e$/yr)		
	Electricity (MWh/yr)	Natural Gas (MBTU/yr)	Electricity Use	Natural Gas Use	Total
DEIR Quantified GHG Emissions	137,007	486,870	23,276	26,137	**49,413**
Updated GHG Calculations	173,360	482,765	29,132	25,915	**55,047**
Difference			**5,856**	**-222**	**5,634**

$MTCO_2e$/yr: Metric tons of carbon dioxide equivalent per year; MWh/yr: megawatt hours per year; MBTU/yr: million British thermal units per year

Sources: DEIR Quantified GHG Emissions from Table 5.21-6 in DEIR Section 5.21; Updated GHG Calculations from Psomas using CalEEMod version 16.3.2 (June 2018)
Note: Total emissions may not add up exactly due to rounding.

Three primary factors contribute to the changes shown in Updated GHG Report Table 2:

- First, 2019 Title 24 Building Energy Efficiency Standards, which were adopted after the DEIR analysis was completed, reduce the Project's electrical consumption estimates for low-density residential and non-residential uses when compared to the 2016 Title 24 Standards, and when compared to MMs 21-2 and 21-3, which require improvements beyond 2016 Title 24 Standards. GHG emissions reductions associated with 2019 Title 24 Standards are -3,173 $MTCO_2e$/yr. The Project includes MM 21-8, which requires use of ENERGY STAR appliances that further reduce electricity consumption. However, for the purposes of the Updated GHG Report analysis, the benefits of MM 21-8 are assumed to be captured within the 2019 Title 24 Standards. MMs 21-6 and 21-7 support the implementation and management of MM 21-8, but were not directly quantified.
- Second, as discussed in more detail in Updated GHG Report Section 2.2, *Energy*, the electrical demand required for the Project's EV charging infrastructure (66,516 MWh/yr) would result in increased GHG emissions of 11,224 $MTCO_2e$/yr.
- Lastly, other factors include reductions not covered by 2019 Title 24 Standards that are attributable to the quantifiable portions of MM 21-1 related to 50 percent on-site renewables, and MMs 13-2 and 13-6 related to high-efficiency lighting, which result in reduced GHG emissions of -2,195 $MTCO_2e$/yr.[1]

In summary, the total projected electrical demand for the Updated GHG Calculations includes the reductions associated with 2019 Title 24 Standards (-3,173 MTCO2e), MM reductions (-2,195 MTCO2e), and EV charging demands (11,224 MTCO2e), resulting in a total increase of 5,856 MTCO2e for the Updated GHG Electrical Calculations when compared to the DEIR Quantified GHG Electrical Emissions.[2] Therefore, the total electrical emissions for the Updated GHG Calculations are 29,132 MTCO2e/yr, as shown in Updated GHG Report Table 2.

As shown in Updated GHG Report Table 1 (see Annotation 2) and Updated GHG Report Table 2, the -222 MTCO2e/year reduction in GHG emissions for natural gas between the DEIR Quantified GHG Emissions and the Updated GHG Calculations is due to inclusion of the energy use reductions associated with the 2019 Title 24 Standards.[3] Because the allocation of energy reductions associated with the 2019 Title 24 Standards between electricity and natural gas is currently unknown and the majority of the reductions is expected to occur in the electricity sector, the projected reductions in energy use that would occur in electricity, and natural gas was calibrated to the comparable level of emissions as reported within the DEIR.[4]

1. Updated GHG Report at 6-7.
2. *Ibid*.
3. *Ibid* at 7.
4. *Ibid*.

Regulatory Requirements

Title 24 Energy Efficiency Standards. Title 24 (Part 11) serves to enhance and regulate California's building standards. Single-family homes built to the 2016 standards will use about 22 percent less energy for lighting, heating, cooling, ventilation and water heating compared to those built pursuant to the standards adopted in 2013. According to the ZNE Plan, the 2019 update to Title 24 (effective 2020) will require all new residential construction to be zero net energy (CEC 2015c).

SB X1 2 and SB 350. SB X1 2 established a use target of 33 percent for renewable energy sources for all electricity providers in California by 2020. SB 350 provides for further development of renewable energy with a target of a 50 percent generation rate by 2030. Conservatively, the estimates below do not include the higher renewable energy target established by SB 350. However, as disclosed previously, a Project design feature requires Project buildings to be 35 percent more energy efficient than 2008 standards, that 60 percent of the commercial building roofs have solar panels and that residences have energy friendly radiant roofs that are "Solar Ready". As the Project will comply with or exceed the applicable regulatory measures, the Project is consistent with the energy related regulatory programs designed to achieve AB 32's goals.

Countywide Energy and Environmental Policy. The Countywide Energy and Environmental Policy (Policy) was adopted by the Los Angeles County Board of Supervisors on January 16, 2007, to provide guidelines for the development and enhancement of energy conservation and environmental programs within County departments. The Policy was also the County's response for the need for energy conservation and reduction in GHG emissions. It directs the County to track its GHG emissions with the California Climate Action Registry, and to reduce its facilities' energy consumption by 20 percent by the year 2015. Under this policy, the Los Angeles County Energy Program (LACEP) provides financing for energy efficiency or solar improvements. Revisions to the Policy, adopted on June 30, 2015, enhance the County's existing and future policies programs, and reporting with regard to environmental sustainability.

Los Angeles Green Building Standards Code. Title 31 of the Los Angeles County Code of Ordinances was adopted in 2013 in response to the mandates set forth in the CALGreen Code. The purpose of Title 31 is to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact, or positive environmental impact, and encouraging sustainable construction practices in planning and design; energy efficiency; water efficiency and conservation; material conservation and resource efficiency; and environmental air quality. Title 31 includes such measures as requirements for energy efficiency, parking for fuel-efficient vehicles, cool roofs, reduction of indoor potable water use, recycled content of construction materials, reduction in construction and demolition waste, and thermal insulation. Title 31 was updated in April 2016 to relocate drought tolerant landscaping and green building requirements from Titles 21 and 22 to Title 31 (DRP 2016a).

Antelope Valley Area Plan (AVAP). AVAP Policy COS 17.2 requires that new buildings be sited and designed in a manner that maximizes efficient use of natural resources, such as air and light, to reduce energy consumption, heat profiles, and GHG emissions. Policy COS 17.4 promotes the use of individual renewable energy systems, by directing the County to require appropriate development standards for individual renewable energy systems to minimize potential impacts and to simplify the permitting process for such systems that meet these development standards. Policy 17.5 calls for the County to protect active and passive solar design elements and systems from shading by neighboring structures and trees through appropriate development standards.

Project Design Features

PDF 21-1. The Green Development Program requires compliance with CALGreen voluntary measure A4.203.1.2.1 for low-rise residential buildings. Therefore, the energy efficiency of these buildings would exceed 2016 Title 24 requirements by 15 percent. PDF 21-1 is required for implementation through MM 21-2.

PDF 21-2. The Green Development Program requires compliance with CALGreen voluntary measure A5.203.1.2.1 for nonresidential buildings. Therefore, the energy efficiency of nonresidential, hotel, and high-rise residential buildings would exceed 2016 Title 24 requirements by 10 percent. PDF 21-2 is required for implementation through MM 21-3.

PDF 21-3. The Green Development Program requires a minimum of 50 percent of the Project's anticipated electrical energy demand at buildout must be satisfied from on-site renewable energy generation. "Anticipated electrical energy demand" shall be determined on the basis of the anticipated loads for each building as shown in the reports submitted at the time of building permit application pursuant to the Building Energy Efficiency Standards of Title 24. "On-site renewable energy generation" includes, but is not limited to, solar, wind, geothermal, biofuel and hydroelectric systems. PDF 21-3 is required for implementation through MM 21-1.

PDF 21-4. The Green Development Program requires that <u>all</u> ~~a minimum of 70 percent of~~ public and community pools and spas would be equipped with active solar heating systems where heating is necessary or desired. The applicant for a pool permit shall provide the proposed plan for compliance with this provision prior to obtaining a permit for the pool. PDF 21-4 is required for implementation through MM 21-5.

PDF 21-5. The Green Development Program requires that deeds, CC&Rs, or similar legal documents contain the following requirement: The owners of all single-family and multi-family residential units shall be required, upon resale, to present to the buyer a written energy audit checklist prepared by a qualified third party at the time the seller provides the buyer with the Real Estate Transfer Disclosure Statement required by Section 1102 et seq. of the California Civil Code The energy audit checklist shall certify that all HVAC systems, thermostats, appliances, windows and swimming pools (if applicable) are the same as those originally installed or, if changed, otherwise comply with Centennial's Green Development Program. All residential pool covers shall be removable, and shall not be automatic retractable covers.

The CC&Rs of the master homeowners association or other applicable association shall require compliance with the provisions of this measure and shall provide notice to individual owners of the resale energy audit checklist requirement. The master homeowners association or other applicable association shall monitor compliance and provide the County with an annual report of compliance with this measure. PDF 21-5 is required for implementation through MM 21-6.

PDF 21-6. The Green Development Program requires that deeds, CC&Rs, or similar legal documents contain the following requirement: For nonresidential buildings, within 90 days

after the end of the first full calendar year following the issuance of the certificate of occupancy and within 90 days after each 5-year period thereafter, the owner or tenant in possession thereof shall submit to the master commercial owners association or other applicable association a report prepared by the owner or a qualified, independent third party that evaluates whether all major building systems such as heat furnace, air conditioner, and other mechanical fixtures are working within the design standards established for each system. The master commercial owners association or other applicable association shall monitor compliance and provide the County with an annual report of compliance with this measure. PDF 21-6 is required for implementation through MM 21-7.

PDF 21-7. The Green Development Program requires builders to install energy efficient major appliances and HVAC systems which meet the more stringent of applicable CEC requirements or ENERGY STAR requirements. Major appliances subject to this requirement include dishwashers, clothes washers, refrigerators, and room air conditioners. PDF 21-7 is required for implementation through MM 21-8.

PDF 21-8. The Green Development Program requires that the Project's wastewater reclamation facilities (WRF) will ~~include equipment to~~ capture and reuse biogas for energy production. PDF 21-8 is required for implementation through MM 21-9.

As the Project will incorporate these project design features and must comply with these applicable regulations imposed by law, the Project would contribute to the achievement for AB 32's goals related to energy use.

Water Supply, Treatment, and Distribution

Indirect GHG emissions result from the production of electricity used to convey, treat and distribute water and wastewater. The amount of electricity required to convey, treat and distribute water depends on the volume of water as well as the sources of the water. Additional emissions from wastewater treatment include CH_4 and N_2O, which are emitted directly from the wastewater. Estimated indoor and outdoor water use quantities and source are shown in Table 5.21-7 and are summarized from the data provided in Section 5.18, Water Resources. GHG emissions were calculated in CalEEMod using energy data from the CAPCOA publication, *Quantifying Greenhouse Gas Mitigation Measures* (CAPCOA 2010). As shown in Table 5.21-7 GHG emissions from water use at buildout are estimated at 7,387 $MTCO_2e$ per year. A summary of all Project-related greenhouse gas emissions is presented in Table 5.21-10 later in this section.

TABLE 5.21-7
WATER USE AND GREENHOUSE GAS EMISSIONS

Water Use/Source	Water Use (afy)		GHG Emissions ($MTCO_2e$/yr)
	Indoor	Outdoor	
Indoor/Imported	5,436		6,329
Outdoor/Imported		1,518	434
Outdoor/Water bank		4,578	624
Total	**5,436**	**6,096**	**7,387**

afy: acre-feet per year; GHG: greenhouse gas; $MTCO_2e$/yr: Metric tons of carbon dioxide equivalent per year.

Annotation 11:

As shown in Updated GHG Report Table 1 (see Annotation 2), Project GHG emissions attributable to water supply, treatment and distribution in the Updated GHG Calculations are 4,203 $MTCO_2e$/yr, as compared to the 7,387 $MTCO_2e$/yr in the DEIR Quantified GHG Emissions, which represents a reduction of -3,184 $MTCO_2e$/yr.[1] As discussed in more detail in Updated GHG Report Section 2.3, *Water and Wastewater Emissions*, the water and wastewater emissions estimates in the Updated GHG Calculations reflect: (1) updated water supply and conveyance energy requirements for Project local water supplies; (2) CalEEMod wastewater treatment default adjustments to exclude treatment technologies that will not be used by the Project; and (3) the Project's recapture and use of biogas to generate power from the wastewater treatment process.[2] The Updated GHG Report used MM 18-1 and MMs 21-9 through 21-13 to quantify the water and wastewater reductions in the Updated GHG Calculations.[3] MM 18-2 and MMs 19-1 through 19-5 support the implementation and management of these quantified MMs, but were not directly quantified in the Updated GHG Report.[4]

1. Updated GHG Report at 3.
2. Ibid at 8.
3. Ibid.
4. Ibid.

Regulatory Requirements

California Water Code. Sections 10910 through 10915 of the *California Water Code* require preparation of a project-specific Water Supply Assessment for developments like the Project. Sections 10610.4, 10617, and 10620 of the *California Water Code* require urban water suppliers to develop water management plans to actively pursue the efficient use of available supplies.

SB X7-7 (Water Conservation Act of 2009). The Water Conservation Act of 2009 sets an overall goal of reducing per-capita urban water use by 20 percent by December 31, 2020. The State is required to make incremental progress toward this goal by reducing per-capita water use by at least 10 percent by December 31, 2015. This in an implementing measure of the Water Sector of the AB 32 Scoping Plan. Reduction in water consumption reduces the

energy necessary and the associated emissions to convey, treat, and distribute the water; it also reduces emissions from wastewater treatment.

State Model Water Efficient Landscape Ordinance (MWELO) and Executive Order B-29-15. The MWELO (CCR Title 23, Division 2, Chapter 2.7) establishes an outdoor water budget for new landscaped areas that are 500 square feet or larger, and rehabilitated landscaped areas that are 2,500 square feet or larger (DWR 2015). EO B-29-15 called for revisions to the MWELO in order to increase water efficiency standards for new and rehabilitated landscapes through more efficient irrigation systems, greywater usage, on-site storm water capture, and by limiting the portion of landscapes that can be covered in turf. It also established a goal of achieving a statewide reduction in potable urban water usage of 25 percent relative to water use in 2013 (California 2015b). The California Department of Water Resources updated the MWELO in December 2015 to incorporate these elements.

Title 24 Green Building Standards Code As Adopted by the Building Standards Commission. The Building Standards Commission, which regulates construction of public schools and community colleges in California, approved a modified version of the MWELO that applies to public schools and community colleges within the Project site.

Title 24 Green Building Standards Code. The California Green Building Code includes water efficiency requirements for new residential and nonresidential structures, including the requirement that indoor potable water use be reduced by 12 percent through the use of water saving fixtures and or flow restrictors.

Los Angeles Green Building Standards Code. Title 31 of the Los Angeles County Code of Ordinances was adopted in 2013 in response to the mandates set forth in the CALGreen Code. The purpose of Title 31 is to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact, or positive environmental impact, and encouraging sustainable construction practices in planning and design; energy efficiency; water efficiency and conservation; material conservation and resource efficiency; and environmental air quality. Title 31 includes specific measures concerning drought-tolerant landscaping that require: (1) turf area shall be water-efficient and shall not exceed 25 percent of the total landscaped area; (2) non-invasive drought-tolerant plant and tree species appropriate for the climate zone region shall be utilized in at least 75 percent of the total landscaped area; and (3) hydrozoning irrigation techniques shall be incorporated into the landscape design.

Antelope Valley Area Plan (AVAP). AVAP Policy COS 2.1 requires new landscaping to comply with applicable water efficiency requirements in the County Code (including the measures discussed above). Policy COS 2.2 requires low flow plumbing fixtures in all new developments.

Project Design Features

PDF 21-17. The Green Development Program requires each applicant for an applicable construction permit for a nonresidential or multi-family building to install recycled water infrastructure to serve common areas for these facilities, except where prohibited by law. To

the extent recycled water is produced within the Project and available, recycled water shall be used for landscape irrigation within those common areas. Compliance with these measures shall be established prior to the issuance of a building permit for nonresidential and multi-family facilities and at the time of County approval of final landscaping plans submitted by the applicant after final map recordation for homeowners association common areas. Covenants, conditions, and restrictions shall require the owners of such common areas to maintain, repair and replace irrigation systems and plantings in accordance with County approved plans. PDF 21-17 is required for implementation through MM 21-10.

PDF 21-18. The Green Development Program requires each applicant for an applicable construction permit for a nonresidential building to install indoor plumbing fixtures and fixture fittings that would reduce the overall use of potable water within the building by 12 percent, consistent with 2016 CALGreen Tier 1 nonresidential voluntary measures as prescribed in Section A5.303.2.3.1 of the code. PDF 21-18 is required for implementation through MM 21-11.

PDF 21-19. The Green Development Program requires each applicant for an applicable construction permit for a single or multi-family residential building to install kitchen faucets and appliances that comply with 2016 CALGreen code residential voluntary measures specified in Sections A4.303.1 and A4.303.3 of the code. PDF 21-19 is required for implementation through MM 21-12.

PDF 21-20. The Green Development Program requires that landscaped areas of single-family detached residential front yards and multi-family residential common areas contain no more than 25 percent turf. PDF 21-20 is required for implementation through MM 21-13.

As the Project will incorporate these project design features and must comply with these applicable regulations imposed by law, the Project would contribute to the achievement for AB 32's goals related to water supply, treatment, and distribution.

Solid Waste

Solid waste may be disposed in landfills or diverted for recycling, composting, reuse, or other means to avoid landfilling. Any waste not diverted will be disposed of at a landfill. GHG emissions from landfills are associated with the anaerobic breakdown of material. Solid waste GHG emissions were calculated using Project land use data and CalEEMod default emission factors. As shown in Table 5.21-8, solid waste GHG emissions are estimated at 10,214 $MTCO_2e$ per year. Further below in Table 5.21-10, a summary of all Project-related greenhouse gas emissions is presented.

TABLE 5.21-8
SOLID WASTE GENERATION AND
GREENHOUSE GAS EMISSIONS

Land Use	Solid Waste (tons/yr)	GHG Emissions ($MTCO_2e$/yr)
City Park	9	5
Elementary School	730	367
General Light Industry	118	60
Government (Civic Center)	4,469	2,248
Health Club	372	187
High School	319	161
Office Park	3,424	1,722
Regional Shopping Center	543	273
Single-Family Housing	9,087	4,570
Apartments Mid Rise	1,237	622
Total	20,308	10,214

$MTCO_2e$/yr: Metric tons of carbon dioxide equivalent per year
Totals may not add due to rounding.
Emissions calculations can be found in Appendix 5.11-A.

Annotation 12:

As shown in Updated GHG Report Table 1 (see Annotation 2), Project GHG emissions attributable to solid waste in the Updated GHG Calculations are 5,107 $MTCO_2e$/yr, as compared to the 10,214 $MTCO_2e$/yr in the DEIR Quantified GHG Emissions, which represents a reduction of -5,107 $MTCO_2e$/yr.[1] As discussed in more detail in Updated GHG Report Section 2.4, *Solid Waste Emissions*, the solid waste emissions estimates in the Updated GHG Calculations reflect quantified emission reductions associated with Project implementation of MM 17-10 (see Final EIR Appendix 2.0-C.Rev).[2] MM 17-10 requires that at least 75 percent of Project operational waste be diverted from landfill disposal, which is consistent with the implementation of the AB 341 goals for statewide recycling.[3] CalEEMod calculates GHG emissions based on the volume of waste subject to landfill decomposition. The 75 percent waste diversion requirement in MM 17-10 reduces solid waste GHG emissions by -5,107 $MTCO_2e$/yr from the DEIR Quantified GHG Emissions.[4]

1. Updated GHG Report at 3.
2. Ibid at 9.
3. Ibid.
4. Ibid.

Regulatory Requirements

AB 341. AB 341 established a statewide diversion rate for solid waste of not less than 75 percent through measures such as source reduction, recycling, or composting by the year 2020, and annually thereafter. That legislation increased the solid waste diversion rate by 25 percent compared to the California Integrated Waste Management Act of 1989 that it replaced.

Los Angeles County Roadmap for a Sustainable Waste Management Future. As discussed above, the County's Roadmap for a Sustainable Waste Management Future sets to achieve 80 percent diversion from landfills by 2025; 90 percent diversion from landfills by 2035; and 95 percent (or higher) diversion from landfills by 2045. To accomplish these goals, the Working Group identified specific recommended initiatives, which will be expanded in detailed implementation plans. Although the Roadmap does not contain currently enforceable regulations, development under the Centennial Specific Plan will comply with any implementation plans once adopted.

Project Design Features

PDF 17-3. PDF 17-3 of Section 5.17, Other Services, states that the Project includes a Solid Waste Management Plan to achieve the goal of diverting 75% of operational solid waste from the Project requiring landfill disposal. Property Owners shall process on-site, contract with a waste management company and/or recyclers/composters, and/or self-haul to waste and recycling facilities to properly recycle, divert, compost, and dispose of solid wastes generated on-site, such as metals, paper, household plastics, glass, cardboard, food waste, and green waste. The waste hauler shall be required by contract to maintain records showing the diversion from landfills of not less than 75 percent of the operational waste generated by the Project. PDF 17-3 is required for implementation through MM 17-10.

As the Project will incorporate this project design feature and must comply with this applicable regulation imposed by law, the Project would contribute to the achievement for AB 32's goals related to solid waste.

Mobile Sources

The GHG emissions associated with on-road mobile sources are generated from residents, workers, customers, and delivery vehicles visiting the land use types in the Project. The emissions associated with on-road mobile sources includes running and starting exhaust emissions, evaporative emissions, brake and tire wear, and fugitive dust from paved and unpaved roads. Mobile source emissions were calculated in CalEEMod. Trip generation rates were adjusted to be consistent with the trip generation data provided in the Project traffic impact analysis (TIA) (Stantec 2016). Average trip distance inputs were adjusted based on VMT data in the Project TIA. VMT and GHG emissions results are shown in Table 5.21-9. GHG emissions based on 2035 on-road emissions factors are calculated to be 160,904 $MTCO_2e$ per year. Further below in Table 5.21-10, a summary of all Project-related greenhouse gas emissions is presented.

TABLE 5.21-9
MOBILE SOURCE VEHICLE MILES TRAVELED AND GREENHOUSE GAS EMISSIONS

Land Use	Vehicle Miles Traveled (VMT/yr)	GHG Emissions ($MTCO_2e$/yr)*
City Park	750,300	194
Elementary School	15,864,160	4,098
General Light Industry	4,087,962	1,056
Government (Civic Center)	45,359,777	11,718
Health Club	7,694,986	1,988
High School	8,950,942	2,312
Office Park	128,855,027	33,287
Regional Shopping Center	79,419,401	20,516
Single-Family Housing	249,898,307	64,556
Apartments Mid Rise	81,986,191	21,179
Total	622,867,052	160,904

VMT/yr: vehicle miles traveled per year; $MTCO_2e$/yr: Metric tons of carbon dioxide equivalent per year

* CalEEMod does not output mobile source GHG emissions by land use; emissions apportioned based on VMT.

Total may not add due to rounding.

Emissions calculations can be found in Appendix 5.11-A.

Annotation 13:

As shown in Updated GHG Report Table 1 (see Annotation 2), Project GHG emissions attributable to mobile sources in the Updated GHG Calculations is 77,007 $MTCO_2e$/yr, as compared to the 160,904 $MTCO_2e$/yr in the DEIR Quantified GHG Emissions, which represents a reduction of -83,897 $MTCO_2e$/yr.[1] As discussed in more detail in Updated GHG Report Section 2.1, *Mobile Emissions*, the mobile GHG emissions estimates in the Updated GHG Calculations shown in Updated GHG Report Table 1 primarily reflect: (1) an increase in EV adoption rate from 4 percent to 50 percent at Project buildout (*i.e.*, over at least 20 years); and (2) internal and external trip reductions from achieving the required minimum SOV use levels by (MM 10-25).[2] In addition, smaller mobile source reductions are attributable to the quantification of the Project's mitigations for affordable housing (MM 21-14), pedestrian facilities (MMs 21-22, 14-11, and 10-26), and telecommuting attributes (MM 10-1).[3]

1. Updated GHG Report at 3.
2. *Ibid* at 4-6.
3. *Ibid* at 6.

Regulatory Requirements

Light-Duty Vehicle Greenhouse Gas Emissions Standards and Corporate Average Fuel Economy Standards. The USEPA and the NHTSA have been working together on developing a National Program of regulations to reduce GHG emissions and to improve the fuel economy of light-duty vehicles. On April 1, 2010, the USEPA and NHTSA announced a joint Final Rulemaking establishing standards for 2012 through 2016 model year vehicles. This was followed up on October 15, 2012, when the agencies issued a Final Rulemaking with standards for model years 2017 through 2025. The rules require these vehicles to meet an estimated combined average emissions level of 295 grams of CO_2 per mile by 2012, decreasing to 250 grams per mile by 2016, and finally to an average industry fleet-wide level of 163 grams per mile in model year 2025. The 2016 standard is equivalent to 35.5 miles per gallon (mpg) and the 2025 standard is equivalent to 54.5 mpg if the levels were achieved solely through improvements in fuel efficiency. These standards would cut GHG emissions by an estimated 2 billion metric tons and 4 billion barrels of oil over the lifetime of the vehicles sold under the program (model years 2017–2025).

AB 1493 (Pavley Standard). The Pavley Standard requires CARB to adopt regulations by January 1, 2005, to reduce GHG emissions from non-commercial passenger vehicles and light-duty trucks of model year 2009 and thereafter. The CalEEMod model includes emission reductions for non-commercial passenger vehicles and light-duty trucks of model year 2017–2025.

Executive Order S-01-07 and CARB's Low Carbon Fuel Standard (LCFS). Executive Order S-01-07 (January 18, 2007) requires a ten percent or greater reduction in the average fuel carbon intensity for transportation fuels in California regulated by CARB. The LCFS regulation went into effect on April 15, 2010, and requires a reduction in the carbon intensity of transportation fuels used in California by at least ten percent by 2020. It imposes fuel requirements on fuel that will be sold in California that will decrease GHG emissions by reducing the full fuel-cycle and the carbon intensity of the transportation fuel pool in California.

Advanced Clean Cars Program. The Advanced Clean Cars program, introduced in 2012, combines the control of smog, soot causing pollutants and greenhouse gas emissions into a single coordinated package of requirements for model years 2017 through 2025.

Cap-and-Trade Regulation. Emissions associated with transportation (largely in the form of consumption of transportation fuels) are the largest portions of Project GHG emissions. Transportation fuels are subject to the cap-and-trade regulation discussed previously in this section. The regulation requires that emissions generated by the combustion of fuels be reduced over time. Although not accounted for under the CalEEMod estimates of the Project's GHG emissions, the cap-and-trade regulations relating to fuels will reduce the Project GHG emissions beyond the estimates included in this section.

Antelope Valley Area Plan (AVAP). Under AVAP Policy M 2.3, the County must require trip reduction measures to relieve congestion and reduce air pollution form vehicle emissions when evaluating new development proposals.

Project Design Features

PDF 21-9. The Green Development Program requires that the Project establish a Transportation Management Association (TMA) that develops strategic linkages with other Antelope Valley/Santa Clarita Valley TMAs or like organizations in order to maximize transit efficiencies and services. The TMA's purpose is to coordinate and facilitate transit and rideshare usage to serve as many riders as possible; to promote multi-modal transportation services and options; and to reduce resident and employee use of single-occupancy automobiles for off-site commuting, and for internal travel within the Specific Plan. PDF 21-9 is required for implementation through MM 10-1, detailed in Section 5.10, Traffic, Access, and Circulation. Elements of MM 10-1 that would reduce fossil fuel VMT and thereby reduce GHG emissions include, but are not limited to:

- Providing residents and employees with multiple modes of accessibility for internal and external trips by future residents and visitors;
- Providing residents and employees on the Project site with multiple modes of transportation;
- Allowing for 60 percent of residential units to be located within one-half mile of a Village center that includes retail uses;
- Providing parks within a 5-minute walk of all residences;
- Locating 90 percent of residents within a 10-minute bike ride of retail;
- Locating 70 percent of residents within a 15-minute bike ride of employment center;
- Locating 85 percent of residents within walking or biking distance of a school;
- Requiring TMA implementation of combination of transit and transportation measures to reduce on-site single-occupancy automobile use by 30 percent in relation to standard ITE-generation rates for the overall Project;
- Requiring TMA implementation of a combination of measures to reduce off-site peak hour commutes to and from the Project site in single-occupancy automobiles by 20 percent; and
- Incorporating Transportation Demand Management (TDM) features to reduce dependence on the automobile, provide for a more efficient use of transportation resources among Project occupants, and thereby reduce pollutant emissions. The key TDM elements that are inherent in the overall Mobility Plan are
    - Sidewalks, greenway trails, and community trails that link residential, schools, shopping, and employment areas;
    - Creation and ongoing operation of a Transportation Management Association (TMA) to fund and manage the operation of ongoing transportation programs, including but not limited to transit and on-demand services.
    - Small- to medium-sized streets and blocks that allow for shorter walking distances to retail, parks, schools, and other destinations;
    - Pedestrian environments incorporated with public streets;

- Parking behind buildings to encourage walking in retail areas along street frontage; and
- Parks within 0.25 mile of all residences.

PDF 21-10. The Centennial Affordable Housing Implementation Plan (see Appendix 3-H of the Centennial Specific Plan, which is in Appendix 4.0-A of the EIR) will be adopted in conjunction with the Specific Plan and will include dedication of a minimum of ten percent of all homes in Centennial communities that permit housing, with the exception of the lowest density area (Community 8-2) to be affordable housing units. A range of employment opportunities will be created within the community; therefore, a range of housing needs will be provided to reduce the number of vehicle trips (particularly long trips outside the Project). CAPCOA's *Quantifying Greenhouse Gas Mitigation Measures* identifies affordable housing as a quantifiable measure for reducing GHG emissions as it allows lower income families to live closer to jobs centers (CAPCOA 2010). PDF 21-10 is required for implementation through MM 21-14.

PDF 21-11. The *Centennial Specific Plan's* Green Development Program requires the installation of one 208/240 VAC receptacle that may be used for charging electric vehicles in each detached and attached single-family residence in a manner consistent with 2016 CALGREEN Code Voluntary Tier 1 Section A4.106.4.1. The installation shall comply with requirements of Section 4.106.4.1 of the 2016 CALGreen Code. PDF 21-11 is required for implementation through MM 21-15.

PDF 21-12. The *Centennial Specific Plan's* Green Development Program requires each applicant to provide plans and specifications to the County demonstrating compliance with the Electric Vehicle Supply (EVS) charging station measures specified in MM 11-4. If and to the extent subsequently approved by the County, compliant with state laws, and resulting in no new significant impacts to the environment following County review and approval, EVS charging stations may be replaced by "alternative energy fueling stations" which may include other types of electric vehicle charging technology (e.g., operating at higher or lower voltages), or alternative vehicular fuel technology that results in zero or near zero (as defined by CARB) GHG emission such as hydrogen fuel cells, biofuels, or other qualifying fuel technologies. An electric charging station shall allow for simultaneous charging of two electric vehicles. ~~for an applicable construction permit for a Business Park or Institutional land use to install "alternative energy fueling stations" as listed below. An "alternative energy vehicle fueling station" is a 208/240 VAC electrical vehicle charging station or a station providing another new or improved technology (e.g. CNG) and hydrogen fuel cell) that provides refueling for vehicles that do not use fossil fuel.~~

- Business Park and Institutional land use designations shall provide a minimum of one alternative energy vehicle fueling station on site for the first 50,000 square feet of usable floor space and additional alternative energy vehicle fueling stations for each additional 50,000 square feet of usable floor space thereafter.
- Multi-family residential buildings of at least seventeen ~~20~~ 17 residential units shall provide a minimum of one alternative energy vehicle fueling station for the first

~~twenty~~ seventeen (~~20~~ 17) residential units and an additional alternative energy vehicle fueling station for each additional ~~twenty~~ seventeen (~~20~~ 17) residential units thereafter.

- The Town Center and each Village Center shall provide a minimum of one alternative energy vehicle charging station.
- Designated Transit Hubs shall provide a minimum of one alternative energy vehicle charging station.

PDF 21-12 is required for implementation through MM 21-16.

PDF 21-13. The Green Development Program requires that prior to the issuance of each nonresidential construction permit, the Project Applicant/Developer shall provide plans and specifications to the County demonstrating that the following features have been incorporated into the building designs for non-residential buildings:

- Bicycle parking spaces at a rate of 5 percent of minimum required vehicle parking spaces for non-residential land uses.
- Preferential parking for low-emitting, fuel-efficient, and carpool/van vehicles shall be provided as specified in Section A5.106.5.1, Nonresidential Voluntary Measures, of the CALGreen Code.

PDF 21-13 is required for implementation through MM 21-17.

PDF 21-14. The Green Development Program requires that prior to the issuance of an applicable construction permit for each multi-family residential building permit, the Project Applicant/Developer shall provide plans and specifications to the County demonstrating that the following features have been incorporated into the building designs or specifications:

- Visitor parking shall include preferentially located parking spaces for ~~alternative-fueled~~ electric vehicles.
- Bicycle parking shall be provided as specified in Section A4.106.9, Residential Voluntary Measures, of the CALGreen Code or as required by Section 22.52.1225B of the County Code, whichever is more stringent.

PDF 21-14 is required for implementation through MM 21-18.

PDF 21-15. The Green Development Program requires that, prior to issuance of an applicable construction permit for parking structures and parking lots with 20 or more parking spaces that serve uses other than residential or nonresidential buildings (e.g., trailhead, park), and parking structures and parking lots that serve multifamily residential buildings with 17 or more multifamily units, the Project Applicant/Developer shall provide plans and specifications to the County demonstrating that the following features have been incorporated into the parking facility:

- The parking facility shall include a minimum of five percent preferentially located parking spaces for ~~alternative-fueled (~~electric, ~~natural gas, or similar low-emitting technology)~~ vehicles.
- Five percent of ~~T~~the total number of parking spaces provided in the parking facility, but in no case less than one, shall be Electric Vehicle Parking Spaces (EV Spaces), as defined in CALGreen Code Section 202, capable of supporting future Electric Vehicle Supply Equipment (EVSE), as defined in CALGreen Code Section 202~~ include at least one electric vehicle charging station. Electrical lines shall be designed and sized to add additional charging stations for up to three percent of the total parking spaces when a demand is demonstrated.~~ Calculations for the required number of EV spaces shall be rounded up to the nearest whole number and ~~T~~the design and installation of each EV space shall be consistent with Section A4.106.8.2, Residential Voluntary Measures, and Section 4.106.4.2, of the CALGreen Code.
- For residential parking facilities, bicycle parking shall be provided as specified in Section A4.106.9, Residential Voluntary Measures, of the CALGreen code or as required by Section 22.52.1225B of the County Code, whichever is more stringent.

PDF 21-15 is required for implementation through MM 21-19.

PDF 21-16. The Green Development Program requires that the Project Applicant/Developer provide:

- Internet infrastructure and high-speed broadband access to facilitate telecommuting, and
- A community intranet (or similar) with access for homeowners associations; interest groups; local event scheduling; schools, library, carpool and transit services; and other on-site entertainment and amenities reduce the need for people to use automobile travel to obtain the information that is provided.

Compliance shall be required prior to the issuance of building permit for the 1,000th residential unit. PDF 21-16 is required for implementation through MM 10-2 in Section 5.10, Traffic, Access, and Circulation.

As the Project will incorporate these project design features and must comply with these applicable regulations imposed by law, the Project would contribute to the achievement for AB 32's goals related to mobile source emissions.

Estimated Project operational GHG emissions are shown in Table 5.21-10. Table 5.21-10 also shows the combined operational, construction, and vegetation change GHG emissions.

As previously described in Section 5.21.5, under Threshold 21-1, this impact analysis evaluates consistency with applicable regulatory programs designed to reduce GHG emissions and that contribute to achievement of AB 32's goals as the primary significance criteria, a method of analysis that is consistent with pathways to compliance described in the *Newhall* decision. The quantitative emissions data in Tables 5.21-4 through 5.21-10 are

provided for information purposes. Also for information purposes, Table 5.21-10 compares the emissions with the AVAQMD project-level CEQA significance threshold and the SCAQMD project-level recommended GHG efficiency threshold, both discussed in more detail below.

TABLE 5.21-10
OPERATIONAL AND TOTAL GHG EMISSIONS

GHG Sources	Emissions $MTCO_2e$	Percent of Operational Emissions
Operational	239,215	
Area	11,297	5%
Energy	49,414	21%
Mobile	160,904	67%
Solid waste	10,214	4%
Water	7,387	3%
Construction	4,490	
Vegetation loss	922	
New trees	-249	
Total	**244,379**	
AVAQMD Project-Level CEQA significance threshold	***100,000***	
Exceeds threshold?	Yes	
Service population (SP)	80,825	
GHG Efficiency	**3.02**	
SCAQMD Plan-Level staff- proposed "plan-level" GHG efficiency threshold ($MTCO_2e$/SP/Year)	***4.1***	
Exceeds threshold?	No	
SCAQMD Plan-Level staff- proposed "project-level" recommended GHG efficiency threshold ($MTCO_2e$/SP/Year)	***3.0***	
Exceeds threshold?	Yes	

GHG: greenhouse gas; MTCO2e: metric tons of carbon dioxide equivalent; AVAQMD: Antelope Valley Air Quality Management District; SCAQMD: South Coast Air Quality Management District.

Emissions calculations can be found in Appendix 5.11-A.

Annotation 14:

Updated GHG Report Table 1(below), compares the DEIR Quantified GHG Emissions (as shown in DEIR Table 5.21-15, above) with the results of the Updated GHG Calculations described in the Updated GHG Report. As explained in the Updated GHG Report, total Project emissions in the Updated GHG Calculations are 157,642 metric tons of carbon dioxide equivalent per year ($MTCO_2e$/yr), a reduction of -86,736 $MTCO_2e$/yr (approximately 35 percent) from the DEIR Quantified GHG Emissions of 244,370 $MTCO_2e$/yr.[1]

UPDATED GHG REPORT TABLE 1
DEIR QUANTIFIED GHG EMISSIONS AND UPDATED GHG CALCULATIONS
($MTCO_2E$/YEAR)

GHG Emission Sources	DEIR Quantified GHG Emissions	Reductions		Net Change in GHG Emissions	Updated GHG Calculations
		From Regulations and CalEEMod Update	*From Mitigation Measures*		
Mobile	160,904	-52,694[a]	-31,203[b]	-83,897	77,007
Energy	49,414	5,584	50	5,634	55,047
Electrical Power	*23,276*	*5,806*[c]	*50*[d]	*5,856*	*29,132*
Natural Gas	*26,137*	*-222*	*0*	*-222*	*25,915*
Water and Wastewater	7,387	0	-3,184[e]	-3,184	4,203
Solid Waste	10,214	-5,107[f]	0	-5,107	5,107
Area	11,297	0	-74[g]	-74	11,223
Construction	4,490	0	0	0	4,490
Vegetation	673	-108[h]	0	-108	565
Total Emissions	**244,379**	**-52,324**	**-34,412**	**-86,736**	**157,642**

Sources: DEIR Quantified GHG Emissions from DEIR Section 5.21; Updated GHG Calculations from Psomas using CalEEMod version 16.3.2 (June 2018).

a Reductions assume that 80 percent of the GHG emissions reductions attributable to the utilization of EVs at Project buildout are due to regulatory, CalEEMod and EV market development factors (see "Mobile Emissions" discussion below).

b Reductions attributable to MM 10-1, MM 10-25, MM 10-26, MM 21-14, MM 21-22, and MM 14-11, as well as 20 percent of the reductions attributable to the utilization of EVs at Project buildout (see "Mobile Emissions" discussion below).

c Overall increases attributable to combination of EV charging infrastructure emissions (increase of 11,224 $MTCO_2e$/yr allocated at 80 percent per footnote "a" above, and due to MM 11-4, MM 11-6, MM 21-15, MM 21-16, MM 21-18 and MM 21-19). GHG decreased emissions are also included, due to 2019 Title 24 Standards (reductions of -3,173 $MTCO_2e$/yr).

d Overall increases attributable to combination of EV charging infrastructure emissions (increase of 11,224 $MTCO_2e$/yr allocated at 20 percent per footnote "b" above), and due to MMs 13-2 and 13-6 (reduction of -109 $MTCO_2e$/yr) and MM 21-1 (-2,086 $MTCO_2e$/yr).

e Reductions attributable to MM 18-1, MM 21-9, and MM 21-13.

f Reductions attributable to MM 17-10 and attributed to regulatory factors.

g Reductions attributable to MM 11-3 and electric landscape equipment (Green Development Program).

h Reductions attributable to MM 7-11, MM 7-12 and MM 21-20 and attributed to regulatory factors.

Note: Total emissions may not add up exactly due to rounding.

As discussed in more detail in Updated GHG Report Section 2.2, *Energy*, due to the combination of quantified EV charging demand, which increases Project electricity use, and reductions in electricity use associated with the new 2019 Title 24 Building Energy Efficiency

Standards, which decreases Project electricity use, the Updated GHG Calculations include an overall increase GHG emissions from the use of electrical power when compared to the DEIR Quantified GHG Emissions.[2] However, as discussed in Updated GHG Report Section 2.1, *Mobile Emissions*, a higher rate of EV adoption reduces mobile source GHG emissions by -83,897 $MTCO_2e$/yr from the DEIR Quantified GHG Emissions.[3]

1. Updated GHG Report at 3.
2. *Ibid* at 6-17.
3. *Ibid* at 5; see also, CEC. March 2018. *California Plug-In Electric Vehicle Infrastructure Projections 2017-2025*: https://www.nrel.gov/docs/fy18osti/70893.pdf

AVAQMD Thresholds

The AVAQMD's *CEQA and Federal Conformity Guidelines* (2011) establishes significance thresholds to assess the regional impact of project-related air pollutant emissions in the AVAQMD. The AVAQMD threshold for GHG emissions is 100,000 $MTCO_2e$ per year. A project with emission rates below this threshold is considered to have a less than significant effect on regional air quality throughout the AVAQMD portion of the MDAB.

For informational purposes, the Project's estimated combined operational, construction, and vegetation change GHG emissions are 244,379 $MTCO_2e$, thus exceeding AVAQMD's 100,000 $MTCO_2e$ threshold.

Annotation 15:

As discussed in Annotation 2, and in the Updated GHG Report, total Project emissions in the Updated GHG Calculations are 157,642 $MTCO_2e$/yr. Although the Updated GHG Calculations represent a reduction of -86,736 $MTCO_2e$/yr from the DEIR Quantified GHG Emissions, for informational purposes, the Updated GHG Calculations exceed AVAQMD's 100,000 $MTCO_2e$/yr threshold.

SCAQMD Thresholds

In April 2008, SCAQMD convened a Working Group to develop GHG significance thresholds. On December 5, 2008, the SCAQMD Governing Board (Board) adopted its staff proposal for an interim CEQA GHG significance threshold for projects where the SCAQMD is the lead agency. As to all other projects, where the SCAQMD is not the lead agency, the Board has, to date, only adopted an interim threshold of 10,000 $MTCO_2e$ per year for industrial stationary source projects (SCAQMD 2008).

For all other projects, SCAQMD staff proposed a multiple tier analysis to determine the appropriate threshold to be used. The draft proposal suggests the following tiers: Tier 1 is any applicable CEQA exemptions; Tier 2 is consistency with a GHG reduction plan; Tier 3 is a screening value or bright line; Tier 4 is a performance based standard; and Tier 5 is GHG mitigation offsets (SCAQMD 2008). According to the presentation given at the September 28, 2010 Working Group meeting, SCAQMD staff proposed a Tier 3 draft threshold of 1,400 to

3,500 $MTCO_2e$/year depending on if the project was commercial, mixed use, or residential (SCAQMD 2010). For the Tier 4 draft threshold SCAQMD staff presented a percent emission reduction target option but did not provide any specific recommendation for a percent emission reduction target; instead it referenced the San Joaquin Valley Air Pollution Control District (SJVAPCD) approach.

The percent reduction target is based on consistency with AB 32 as it was based on the same numeric reductions calculated in the Scoping Plan to reach 1990 levels by 2020. As discussed in Section 5.21.2, Relevant Plans, Policies, and Regulations, the First Update to the AB 32 Scoping Plan states the following (CARB 2014b):

California is on track to meet the near-term 2020 greenhouse gas limit and is well positioned to maintain and continue reductions beyond 2020 as required by AB 32." Specifically, "if California realizes the expected benefits of existing policy goals (such as 12,000 megawatts [MW] of renewable distributed generation by 2020, net zero energy homes after 2020, existing building retrofits under AB 758, and others) it could reduce emissions by 2030 to levels squarely in line with those needed in the developed world and to stay on track to reduce emissions to 80 percent below 1990 levels by 2050.

The second Tier 4 option is to utilize an efficiency target. The targets for 2020 are 4.8 $MTCO_2e$ per year per service population (SP) for project level thresholds where SP is project residents plus employees and 6.6 $MTCO_2e$ per year per SP for a plan level threshold (SCAQMD 2010). The targets for 2035 are 3.0 $MTCO_2e$ per year per SP for project level thresholds and 4.1 $MTCO_2e$ per year per SP for a plan level threshold.

The Working Group has not convened since the fall of 2010. As of the writing of this EIR, the proposal has not been considered or approved for use by the SCAQMD Board.

The Project's estimated combined operational, construction, and vegetation change GHG emissions are 244,379 $MTCO_2e$ and its estimated service population is 57,150 residents and 23,675 employees for a total of 80,825, resulting in annual emissions of 3.02 $MTCO_2e$ per service population. Thus, for informational purposes, the Project's estimated emissions would exceed the 2035 "project-level" efficiency threshold of 3.0 $MTCO_2e$ proposed by SCAQMD staff, which threshold has not been adopted by the SCAQMD Board. However, Project's estimated emissions would not exceed the 2035 "plan-level" efficiency threshold of 4.1 $MTCO_2e$ proposed by SCAQMD staff.

Annotation 16:

As discussed in Annotation 2, and in the Updated GHG Report Section 5.0, the Project's GHG Efficiency based on the estimated service population decreased from 3.02 (as presented in the DEIR Quantified Emissions) to 1.93 (as calculated in the Updated GHG Emissions).[1] Thus, for informational purposes, the Project's estimated Updated GHG Emissions would not exceed either the 2035 "project-level" efficiency threshold of 3.0 $MTCO_2e$/yr or the 2035 "plan-level" efficiency threshold of 4.1 $MTCO_2e$/yr proposed by SCAQMD staff, which thresholds still have not been adopted by the SCAQMD Board.[2]

1. Updated GHG Report at 13-14.
2. *Ibid*.

Threshold 21-2 Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Consistency with the Los Angeles County Community Climate Action Plan

The Los Angeles County CCAP is designed to support the State's overall GHG reduction goals for 2020 under AB 32. The Project's consistency with the CCAP is shown in Table 5.21-11. If the Project is consistent with the CCAP, it would not have significant GHG emissions relative to the CCAP's 2020 planning horizon and the AB 32 reduction target. Since the Project has a phased implementation schedule with full buildout beyond the CCAP's 2020 planning horizon, consistency with the CCAP is only one *Newhall* compliance pathway used in this Section 5.21.6 to evaluate the significance of the Project's GHG emissions. However, the Project's consistency with the CCAP is important for determining the significance of GHG emissions for the current CCAP planning horizon.

As demonstrated in detail in Section 5.8, Land Use, Entitlements, and Planning, the Project would be consistent with the goals and policies of the AVAP, would implement the AVAP and would not conflict with it. Since the CCAP relies on the AVAP to inform its socioeconomic assumptions, and since the Project is consistent with the AVAP, it follows that the Project is also consistent with the socioeconomic assumptions contained in the County's CCAP.

The CCAP builds on existing County programs, and adds new actions, as shown in Table 5.21-11. Mandatory new actions are identified in ***bold and italic*** text, but this consistency analysis includes both mandatory and voluntary new actions. Centennial Implementation Actions, as shown in the Table 5.21-11 below, include a brief summary listing of Project Design Features (PDFs) and Mitigation Measures (MMs) presented in applicable topical sections 5.1 through 5.21 of this Draft EIR. The CCAP is a countywide program, and this analysis evaluates elements of the CCAP that are relevant to the Centennial Project.

TABLE 5.21-11
CENTENNIAL PROJECT COMPLIANCE WITH THE LOS ANGELES COUNTY COMMUNITY CLIMATE ACTION PLAN

Existing Initiatives and New CCAP Actions	Centennial Implementation Actions
CATEGORY 1: GREEN BUILDING AND ENERGY	
Existing County Initiatives	
Energy Upgrades to Existing Structures provides rebates and incentives for energy retrofit efficiency projects.	Because Centennial will be a new community, energy efficiency is required for buildings, infrastructure (e.g., outdoor irrigation), and appliances. The Project does not include any existing structures, and thus this CCAP action is not applicable.
Los Angeles County Code (Title 31) requires implementation of sustainable policies for new building design.	The Project is consistent with Title 31 of the County Code ~~applies to the Project,~~ and ~~is~~ implement~~ed~~s ~~through~~ a variety of measures including, for example (1) landscape design restrictions related to minimizing turf grass and the use of non-invasive and drought tolerant plants and tree species; (2) recycling and/or salvaging a minimum of 75% of the non-hazardous construction and demolition debris, and 100% of soils during grading; and (3) compliance with a water budget for landscape irrigation use conforms to the California Department of Water Resources Model Water Efficient Landscape Ordinance.
Commercial Building Performance Partnership provides financial mechanisms for energy conservation upgrades to existing buildings.	Energy conservation is required for new structures, and no retrofits of existing structures are included in the Project and thus this CCAP action is not applicable.
Renewable Energy and Clean Fuels Program implements projects to accelerate the use of compressed natural gas as an alternative fuel.	Renewable energy produced within the Project will be primarily rooftop solar, and at minimum 50% of the Project's anticipated electricity demand will be satisfied from on-site renewable energy generation. It is anticipated that the dominant alternative transportation fuel will be electricity (e.g., electric and hybrid-electric vehicles); however, compressed natural gas (CNG) will also be made available as a transportation fuel to the extent consistent with then-applicable recommendations and/or requirements from the California Air Resources Board (CARB) and County.
New CCAP Actions	
BE-1: Green Building Development encourages energy reductions in new development through voluntary reductions that exceed the minimum standards set forth in the State's CALGreen Building Code (Title 24).	The Project exceeds the CALGreen Building Code minimum requirements in several ways, including: 6. Compliance with CALGreen voluntary measure A4.203.1.2.1 for low-rise residential buildings, resulting in buildings that would exceed 2016 Title 24 requirements by 15% (PDF 21-1).

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CENTENNIAL PROJECT COMPLIANCE WITH THE LOS ANGELES COUNTY COMMUNITY CLIMATE ACTION PLAN

Existing Initiatives and New CCAP Actions	Centennial Implementation Actions
	7. Compliance with CALGreen voluntary measure A5.203.1.2.1 for nonresidential buildings and residential buildings taller than 4 stories, resulting in buildings that would exceed 2016 Title 24 requirements by 10%. 8. Owners of all single-family units and multi-family residential structures are required, upon resale, to present to the buyer a written energy audit checklist at the time the seller provides the buyer with the Real Estate Transfer Disclosure Statement required by Section 1102 et seq. of the *California Civil Code.* The energy audit checklist shall certify that all heating, ventilation, and air conditioning (HVAC) systems, thermostats, appliances, windows, and swimming pools are either the same as originally installed or otherwise comply with the Green Development Program. 9. For nonresidential buildings, within 90 days after the end of the first full calendar year following the issuance of the certificate of occupancy, and within 90 days after each 5-year period thereafter, the owner or tenant in possession thereof shall submit to the master commercial owners association or other applicable association a report prepared by the owner or a qualified, independent third party that evaluates whether all major building systems such as a heat furnace, air conditioner, and other energy-consuming mechanical fixtures are working within the design standards established by the manufacturer of such equipment. 10. Residential appliances offered by builders shall consist ~~exclusively~~ of low-energy and/or low-water consuming appliances that are Energy-Star compliant for each appliance that is rated by Energy Star (e.g., refrigerator, clothes washer, dishwasher, and room air conditioner). These project design features meet and exceed the requirements of ~~Section 22.52.2130~~ Title 31 of the County Code (Green Building).
BE-2: Energy Efficiency retrofits will be further encouraged for existing buildings and structures.	The Project does not include any existing buildings, so this measure is not applicable.

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CENTENNIAL PROJECT COMPLIANCE WITH THE LOS ANGELES COUNTY COMMUNITY CLIMATE ACTION PLAN

Existing Initiatives and New CCAP Actions	Centennial Implementation Actions
BE-3: Solar Installations are encouraged for new and existing buildings	Renewable energy produced within the Project would ~~be generated~~ provide ~~at~~ a minimum of 50% of the Project's anticipated electricity demand ~~would be satisfied from on-site renewable energy generation~~. Specific metrics to achieve this goal include: 1. A minimum of 100% of all single-family detached residential units at buildout shall ~~have~~ be pre-wired to support solar energy collection equipment and a minimum of 30% of all single-family detached residential units at buildout shall have solar energy collection equipment installed on roof areas or on top of other structures on the site (e.g., patio covers or pergolas). 2. Single-family detached residential units with roof areas that are within 30 degrees of true south shall include plumbing appropriate for a solar water heating running from the installed water heater to the solar-ready roof areas, and those with roof areas that are not within 30 degrees of true south shall be plumbed to accommodate an on-demand tankless water heater. 3. A minimum of 10% of all single-family detached residential units at buildout shall either include an installed solar water heater, tankless water heater, or other energy efficient water heater technology approved by the County. 4. A minimum of 30% of all multi-family residential units at buildout shall have solar energy collection equipment, which shall be installed on roof areas facing within 30 degrees of true south. 5. All ~~minimum of 70% of~~ public and community swimming ~~s~~pools constructed within the Project shall be heated by a solar water heating system or renewable power system that provides electricity for water heating. 6. A minimum of 60% of buildings located within Business Park land use designations at buildout shall have solar panel systems installed on roof and parking areas. Such systems shall be installed on roof areas facing within 30 degrees of true south.

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CENTENNIAL PROJECT COMPLIANCE WITH THE LOS ANGELES COUNTY COMMUNITY CLIMATE ACTION PLAN

Existing Initiatives and New CCAP Actions	Centennial Implementation Actions
BE-4: Alternative Renewable Energy Programs are designed to encourage the use of non-solar renewable energy technology such as wind, hydropower, and geothermal resources, as feasible.	The Project site does not have hydropower or geothermal resources. Utility-scale wind plants present a potential hazard to sensitive biological resources such as the California Condor, and utility-scale solar plants are not an authorized use on the Project site or vicinity under the Antelope Valley Area Plan. However, the Specific Plan states that renewable energy systems shall be installed in connection with the development of one or more of the following: residential units, non-residential buildings, public buildings, or Specific Plan utility facilities located either within the Specific Plan area or within its immediate vicinity.
BE-5: Wastewater Treatment Plant Biogas recovery and reuse	The Project's wastewater reclamation facilities (WRF) will include equipment to capture and reuse biogas for energy production.
BE-6: Energy Efficiency Retrofits of Wastewater Equipment promotes efficient treatment equipment	There is no existing wastewater treatment facility at the Project site, so this measure is not applicable.
BE-7 Landfill Biogas encourages renewable biogas projects at regional landfills.	There is no existing or proposed landfill at the Project site, so this measure is not applicable.
CATEGORY 2: LAND USE AND TRANSPORTATION	
Existing County Initiatives	
Healthy Design Ordinance (Ordinance 2013-001, amending Title 21 (Subdivisions) and Title 22 (Planning and Zoning)) is designed to require projects to have better walking environments (e.g., with wider sidewalks and more shade trees), encourage more bicycling (e.g., by requiring bike parking), improve access to healthy foods (e.g., with weekly farmer's markets and permissible community gardens), and enhance project review requirements to provide an opportunity to review healthy design features such as landscaping, lighting, street furniture and bike parking spots.	The Project design ~~complies~~ is consistent with all of the substantive standards of the Healthy Design Ordinance, including but not limited to requirements for right-of-way widths; pedestrian crossings; tree plantings in lot frontages; and bicycle parking facilities. The Project allows community gardens as legally permitted uses in residential, ~~and~~ mixed-use, park, recreation/entertainment, and institutional/civic areas of the Project. The Project Transportation Demand Management (TDM) Program includes bicycle program metrics, discussed below.
Bicycle Master Plan promotes bicycle ridership and bike-friendly designs throughout the County.	The Project includes a safe and aesthetically pleasing dedicated bicycle network and pedestrian system into all development designs, and distributes community uses such as neighborhood parks, elementary schools, and neighborhood-scale retail in key locations throughout the Project to reduce single-occupancy automobile travel for these neighborhood-scale destinations. The Mobility Plan of the Specific Plan ~~Project TDM Program~~ includes bicycle program metrics, discussed below.

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CENTENNIAL PROJECT COMPLIANCE WITH THE LOS ANGELES COUNTY COMMUNITY CLIMATE ACTION PLAN

Existing Initiatives and New CCAP Actions	Centennial Implementation Actions
Sustainable Transportation Programs to increase the efficiency of the transportation network.	The Project includes the following measures to reduce single-occupancy commuter travel to and from the Project site: 1. Land use planning principles that create a balanced master-planned community that includes: A. Mixed-use neighborhoods where residential, commercial, and other employment-generating uses and institutional/public uses are proximate to each other and connected by a network of walkable streets, bikeways and trails to reduce reliance on automobile use within the Project site. B. A diverse range of residential product types, including dedication of a minimum of 10% of residential units as affordable housing, to compliment the diverse range of employment opportunities within the Project and help minimize the off-site employment commuter trips. 2. Establishment of a Transportation Management Association (TMA) that develops strategic linkages with other Antelope Valley/Santa Clarita Valley TMAs or like organizations in order to maximize transit efficiencies and services. The TMA's purpose is also to coordinate and facilitate transit and rideshare usage to serve as many riders as possible, and to reduce the volume of automobile trips within and from the Project site, as described in more detail in the ~~Project TDM Program~~ Mobility Plan below.
New CCAP Actions	
LUT-1: Bicycle Programs and Supporting Facility improvements to expand the County's existing bicycle network.	As a new community, the Project includes a network of bikeways and multi-purpose trails, as well as and community trails, in addition to the greenways and paseos. The Project trail system will connect to the Pacific Crest Trail (PCT), which is designated as a National Scenic Trail that traverses approximately 2,650 miles through 3 states (California, Oregon, and Washington) will be relocated to the west side of 300th Street West, which travels through the Project site. This realignment is not a part of the Project, but is assumed to be the future alignment for evaluation purposes in this EIR. The Project requires bicycle parking facilities for 5% of the minimum required vehicle parking spaces for nonresidential land uses or as required by ~~that meet or exceed the~~

TABLE 5.21-11
CENTENNIAL PROJECT COMPLIANCE WITH THE LOS ANGELES COUNTY COMMUNITY CLIMATE ACTION PLAN

Existing Initiatives and New CCAP Actions	Centennial Implementation Actions
	~~requirements of~~ County Code Section 22.52.1225B, whichever is more stringent, to encourage and support bicycle use.
LUT-2: Pedestrian Network improvements to expand the County's existing pedestrian network.	As a new community, the Project implements a Complete Streets design approach that includes sidewalks and dedicated bicycle network and pedestrian system incorporated into all development designs and throughout the community to reduce single-occupancy automobile travel for neighborhood-scale destinations.
LUT-3: Transit Expansion to create priority bus lanes and improve the existing efficiency of the transportation network.	As a new community, the Project implements a ~~TDM Program~~ Mobility Plan that includes strategic linkages with other Antelope Valley/Santa Clarita Valley TMAs or like organizations in order to maximize transit efficiencies and services. The TMA's purpose is to coordinate and facilitate transit and rideshare usage to serve as many riders as possible. The Project also includes a transit easement running North-South through the center of the development, connecting its most housing-dense areas with the business park, accommodating future internal commuting within the Project site.
LUT-4: Travel Demand Management to encourage ride-sharing and employer-sponsored vanpools to reduce peak-period vehicle trips.	The Project ~~TDM Program~~ Mobility Plan encourages ride-sharing and employer-sponsored vanpools, as well as other measures to reduce automobile trips within and from the Project site. The TDM will be managed by the TMA.
LUT-5: Car-Sharing Program promotes the shared use of private and employer-owned vehicles.	The Project ~~TDM Program~~ Mobility Plan includes formation of strategic partnerships with car sharing services (e.g., Uber or Lyft) and other innovation/technology approaches to increase transportation efficiency, as described in more detail below.
LUT-6: Land Use Design and Density targets land use patterns to support mobility, and improve the diversity of urban and suburban developments	The Project includes a balanced mix of housing, employment, and community uses including schools, retail, and public services, to minimize off-site trips. The Project design also encourages pedestrian and bicycle use through the use of walkable communities planning and design techniques, and includes a diverse range of housing types.
LUT-7: Transportation Signal Synchronization Program Improve the network of traffic signals on the major streets throughout Los Angeles (LA) County.	The Project site does not include any existing traffic signals, but the Project will use synchronized traffic signals to ensure the efficient use of future Project roadways.

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Existing Initiatives and New CCAP Actions	Centennial Implementation Actions
LUT-8: Electric Vehicle Infrastructure. Install EV charging facilities at County-owned public venues and ensure that at least one-third of these charging stations will be available for visitor use.	The Project requires electric vehicle infrastructure, specifically: 1. Builders will be required to install one 240 volt of alternating current (VAC) outlet available for use to charge electric vehicles in the garage or other suitable location for each single-family home. 2. For business park and institutional land uses, a minimum of 1 electric vehicle charging station (consisting of a 208/240 VAC or alternative electric charging technology approved by the County, serving 2 adjacent parking spaces) will be installed for the first 50,000 square feet (sf) of building space, and an additional fueling station will be installed for each subsequent 50,000 sf of building space. 3. For multi-family residential projects that include at least ~~20~~ 17 units, a minimum of 1 alternative energy ~~electric~~ vehicle fueling ~~charging~~ station be installed for the first 17 ~~20~~ units and an additional ~~charging~~ alternative energy vehicle fueling station will be installed for each subsequent ~~20~~ 17 units. 4. Preferential parking for low-emitting, fuel-efficient, and carpool/van vehicles shall be provided for nonresidential structures ~~larger than 20,000 sf and made available for employees and visitors~~ as specified in Section A5.106.5.1, Nonresidential Voluntary Measures, of the CALGreen Code as follows: two for 10 to 25 spaces; four for 26 to 50 spaces; six for 51 to 75 spaces; nine for 76 to 100 spaces; eleven for 101 to 150 spaces; 18 for 151 to 200 spaces; and at least 10% of total for 201 and more spaces. 5. For parking facilities and parking lots with more than 20 spaces, the parking facility or lot must include: A. A minimum of 5% preferentially located parking spaces for alternative-fueled vehicles. B. Electrical lines designed and sized to provide electric vehicle charging stations for up to 3% of parking space when demand is demonstrated.

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Existing Initiatives and New CCAP Actions	Centennial Implementation Actions
LUT-9: Idling Reduction Goal. Encourage idling limits of 3 minutes for heavy-duty construction equipment as feasible within manufacturer's specifications.	The Project includes as a mandatory contract specification for all construction contractors a restriction to limit unnecessary construction equipment idling to 3 minutes, and include methods to encourage equipment operators to achieve the 3-minute goal.
LUT-10: Efficient Goods Movement is designed to improve cargo transport on existing roadways and transportation infrastructure.	The Project includes contributions to California Department of Transportation (Caltrans) to avoid any adverse Project-related impact to goods movement on Interstate (I) 5 and State Route (SR) 138. Contributions are described in mitigation measures in Section 5.10, Traffic, Access and Circulation.
LUT-11: Sustainable Pavements Program is designed to improve the resiliency of, and reduce the GHG emissions associated with, existing paved roadways.	The Project will use durable roadway paving materials that will be determined upon consideration of aggregates, asphalt materials, cementitious materials, recycled materials, and other roadway materials that are commonly used in pavement construction in order to assess from a life-cycle perspective the role they play in contributing to the sustainability of the Project's pavement system. "Cool" pavements will be used to reduce heat island effects.
LUT-12: Electrify Construction and Landscaping Equipment. Utilize electric equipment wherever feasible for construction projects. Reduce the use of gas-powered landscaping equipment.	All landscape maintenance equipment at Centennial will be CARB-approved or electric. The Project will incorporate an outreach and education program for the Centennial property owners, in collaboration of SCAQMD, to reduce the use of gasoline-or diesel-powered landscaping equipment.
CATEGORY 3: WATER CONSERVATION AND WASTEWATER	
Existing County Initiatives	
Conservation rebates, smart gardening workshops and stormwater controls provide water and wastewater improvements in existing communities	This measure does not apply to new communities. The Project includes compliance with drought-response State measures including the Model Water Efficient Landscape Ordinance (MWELO), which are more stringent than required by CALGreen (DWR 2015). The Project includes 2 WRFs that will provide a reliable supply of recycled water for landscaping, to reduce reliance on potable water supplies.
New CCAP Actions	
WAW-1: Per Capita Water Use Reduction Goal. Meet the State established per capita water use reduction goal as identified by Senate Bill (SB) X7-7 for 2020. The State goal is a 20 percent reduction in per capita water use compared to baseline levels.	The final EIR for the Antelope Valley Area Plan (AVAP) update utilized the Antelope Valley Integrated Regional Water Management Plan (AVIRWMP) average Antelope Valley estimate of per capita water use (199 gallons per capita per day [gpcd]) to evaluate the water demand growth that

TABLE 5.21-11
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Existing Initiatives and New CCAP Actions	Centennial Implementation Actions
	could occur from the implementation of the AVAP. At full buildout, the Project's total per capita water use would be approximately 177.5 gpcd. The Project would reduce water demand by approximately 10% below the per capita average consumption in the Antelope Valley. The analysis compared the Project to the baseline per capita consumption in the Project vicinity since the Project site is undeveloped there is not an established baseline of water consumption on the Project site.
WAW-2: Recycled Water, Water Supply Improvement Programs, and Stormwater Runoff. Promote the use of wastewater and gray water to be used for agricultural, industrial, and irrigation purposes. Manage stormwater, reduce potential treatment, and protect local groundwater supplies.	The Project includes a comprehensive water resources management program, including: 1. *Recycled Water.* The Project includes water recycling facility to recycle, and reuse, wastewater piped to the Project WRF. All nonresidential and multi-family development must install recycled water infrastructure to irrigate common areas for these facilities (except where prohibited by law), and all available recycled water shall be used for such irrigation uses. 2. *Potable Water Conservation.* The Project includes numerous potable water conservation measures, including: A. Establishing maximum available water allocations for each residential and commercial parcel, and monitoring and enforcing such allocations through a metering system and rate structure and/or penalty structure for those exceeding their water allocations. B. Restricting outdoor landscaping planting in private yards to a designated low-water plant pallets to minimize use of potable water for private landscaping, ~~prohibiting~~ <u>mandating that only recycled water be used to irrigate</u> turf in commercial <u>areas</u> ~~projects~~, and restricting turf to 25% of landscaped areas on private residential projects. C. Requiring the ~~exclusive~~ use of Energy Star or equivalent major appliances, as described above, that use less water (as well as less energy). D. Requiring the exclusive use of kitchen and bathroom faucets that comply with 2013

TABLE 5.21-11
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Existing Initiatives and New CCAP Actions	Centennial Implementation Actions
	CALGreen code residential voluntary measures specified in Sections A4.303.1 and A4.303.3 of the code. 3. *Storm Water Management.* The Project's integrated water resources management approach will comply with County requirements related to hydrology and flood control considerations through compliance with Low Impact Development (LID) standards and best management practices (BMPs) for sediment management through hydromodification techniques. The Project includes 2 WRFs that will provide a reliable supply of recycled water for landscaping, to reduce reliance on potable water supplies. The Project provides a reliable water supply through use of an integrated water resources management approach that incorporates water conservation measures; uses recycled water for non-potable uses; uses multiple sources of water supply to ensure that the Project's water needs are met without the need to solely rely on the annual delivery of a fixed amount of imported water; provides a high degree of water supply reliability for each stage of Project buildout; and minimizes the impacts of additional water demand on the state's water supply.
CATEGORY 4: WASTE REDUCTION, REUSE AND RECYCLING	
Existing Initiatives	
Community waste diversion programs to redirect 50 percent of solid wastes to recycling or re-use instead of landfills	The Project will exceed this existing measure by implementing a 100 percent diversion of soil during grading activities, and at least ~~70~~ 75 percent of non-hazardous construction and demolition waste. The Project will also divert 75 percent of operational solid waste.
New CCAP Action	
SW-1: Waste Diversion Goal. For the County's unincorporated areas, adopt a waste diversion goal to comply with all State mandates to divert at least 75 percent of waste from landfill disposal by 2020.	The Project includes both a construction and operational waste reduction measures. 1. The Project must implement a plan and monitoring program to ensure recycle or reuse of a minimum of 75% by weight of construction and demolition debris, exclusive of soil, rock, and gravel. This quantity exceeds the 50% requirement of Section 20.87.040 of the County Code and the 75% target proposed in the CCAP.

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Existing Initiatives and New CCAP Actions	Centennial Implementation Actions
	2. The Developer must provide the County with a contract establishing an on-site waste recycling and composting program, including the collection of metals, paper, household plastics, glass, cardboard, green waste and food waste. The waste hauler should be required by contract to maintain records showing the diversion of not less than 75% of the operational waste generated by the Project. The Project will include a minimum of five acres for a Materials Recovery Facility/Transfer Station (MRF/TS), which may include mulching and composting operations and a Household Hazardous Waste Permanent Collection Center. An MRF/TS could be privately or publicly operated. The MRF/TS would allow for all materials that are recyclable to be sorted and compacted for shipment to an off-site recycling processing facility. The Developer shall encourage a waste management company to build these facilities within the Project site by grading, improving, and providing utility hookups by the end of the first phase of construction. The CC&R for the MRF/TS will require that the lot provided within the site remain as a Non-Disposal Solid Waste Processing Facility.
CATEGORY 5: LAND CONSERVATION AND TREE PLANTING	
Existing Initiatives	
Implementation of the urban forestry plan and oak woodlands conservation management plan.	The Project's Natural Resources/Open Space Management Plan includes both on-site and off-site preserve areas. Approximately 5,116 acres of open space are available for use as on-site mitigation and off-site mitigation areas total 23,547 acres, for a combined total of 28,663 acres of preserved open space resulting from Project implementation. The Project avoids development within established Significant Ecological Areas, minimizes disturbance of high-value biological resources, including native grasslands, oak savannas, and oak woodlands, and preserve contiguous open space areas in order to keep its viability as wildlife habitat. Open spaces will be provided within the Business Park that allow for wildlife movement between the southern portion of the Project site through to the drainage located on the northern side of SR 138.

TABLE 5.21-11
CENTENNIAL PROJECT COMPLIANCE WITH THE LOS ANGELES COUNTY COMMUNITY CLIMATE ACTION PLAN

Existing Initiatives and New CCAP Actions	Centennial Implementation Actions
New CCAP Actions	
LC-1: Develop Urban Forests. Support and expand urban forest programs within the unincorporated areas.	The Project's Natural Resources/Open Space Management Plan includes both on-site and off-site preserve areas. Approximately 5,116 acres of open space are available for use as on-site mitigation and off-site mitigation areas total ~~23,547~~ 39,213 acres, for a combined total of ~~28,663~~ 44,329 acres of preserved open space resulting from Project implementation. The Project avoids development within established Significant Ecological Areas, minimize disturbance of high-value biological resources, including native grasslands, oak savannas, and oak woodlands, and preserve contiguous open space areas in order to keep its viability as wildlife habitat. The planting of an estimated 35,123 new trees, as required by the County Tree Planting Ordinance would result in an estimated long-term sequestration of 24,867 metric tons of carbon dioxide equivalent ($MTCO_2e$). This is a conservative analysis, as it is likely that many more trees would be planted than the minimum required by the County ordinance.
LC-2: Create New Vegetated Open Space. Restore and revegetate previously disturbed land and/or unused urban and suburban areas.	This action is not directly applicable to new development projects. However, the Project's Natural Resources/Open Space Management Plan includes both on-site and off-site preserve areas. Approximately 5,116 acres of open space are available for use as on-site mitigation and off-site mitigation areas total ~~23,547~~ 39,213 acres, for a combined total of ~~28,663~~ 44,329 acres of preserved open space resulting from Project implementation. The Project avoids development within established Significant Ecological Areas, minimize disturbance of high-value biological resources, including native grasslands, oak savannas, and oak woodlands, and preserve contiguous open space areas in order to keep its viability as wildlife habitat. Additionally, the Project would plant an estimated 35,123 new trees, as required by the County Tree Planting Ordinance. This would result in an estimated long-term sequestration of 24,867 $MTCO_2e$. This is a conservative analysis, as it is likely that many more trees would be planted than the minimum required by the County ordinance

TABLE 5.21-11
CENTENNIAL PROJECT COMPLIANCE WITH THE LOS ANGELES COUNTY COMMUNITY CLIMATE ACTION PLAN

Existing Initiatives and New CCAP Actions	Centennial Implementation Actions
LC-3: Promote the Sale of Locally Grown Foods and/or Products. Establish local farmers markets and support locally grown food.	The Project will include a weekly Farmer's Market sponsored by the homeowners association (HOA) or other entity selected by the Master Applicant/Developer, and will allow for community gardens as a permitted use in ~~commercial and~~ residential, mixed use, park, recreation/ entertainment, and institutional/civic areas. The Project also accommodates a total of 50-acres for on-site food-growing and agriculture-related uses in places such as community gardens, orchards, groves, and greenhouses.
LC-4: Protect Conservation Areas. Encourage the protection of existing land conservation areas.	The Project's Natural Resources/Open Space Management Plan includes both on-site and off-site preserve areas. Approximately 5,116 acres of open space are available for use as on-site mitigation and off-site mitigation areas total ~~23,547~~ 39,213 acres, for a combined total of ~~28,663~~ 44,329 acres of preserved open space resulting from Project implementation. The Project avoids development within established Significant Ecological Areas, minimize disturbance of high-value biological resources, including native grasslands, oak savannas, and oak woodlands, and preserve contiguous open space areas in order to keep its viability as wildlife habitat.

As shown in Table 5.21-11, the Project would be consistent with, and would not conflict with, all applicable actions of the CCAP and its greenhouse gas reduction strategy.

The CCAP also recognizes the importance of ongoing implementation of statewide GHG reduction statutory mandates, including the following:

- **STATE-1:** Renewable Portfolio Standard, which requires California utilities to generate 50 percent of the state's electricity from renewable sources by 2030.
- **STATE-2:** CALGreen Building Code Standards (Title 24), which reduces GHG emissions through energy and water efficiency standards to be implemented in Commercial and Residential Buildings.
- **STATE-3:** Pavley/Advanced Clean Cars fuel efficiency standards, and Low Carbon Fuel Standards for on-road transportation, to reduce GHG emissions from fossil fuel use in transportation.

- **STATE 4:** Low Carbon Fuel Standard for Off-road Equipment and Vehicles, to reduce GHG emissions from fossil fuel use in construction equipment and other off-road equipment and vehicles.
- **STATE 5:** California Cap-and-Trade Program, to reduce GHG from stationary sources like factories and power plants, and from fossil fuel use.

These statewide mandates apply to Centennial-related buildings and activities, and will further reduce Project-related GHG emissions.

Consistency with the SCAG 2016–2040 RTP/SCS

The 2016-2040 RTP/SCS is the regional sustainable community strategy prepared pursuant to SB 375. The 2016–2040 RTP/SCS, prepared pursuant to SB 375 includes the same land use designations and density assumptions for Centennial Project site as the approved 2012–2035 RTP/SCS. As demonstrated in Section 5.9, Population, Housing, and Employment, the regional projections formally adopted by SCAG in its 2012–2035 RTP/SCS are used to determine Project conformity with these projections.

Demographic projections included as part of the adopted SCAG 2016–2040 RTP/SCS include development of the Project and are the most recently updated demographic projections available for the Project site and regional vicinity. The County and regional projections were formally adopted by SCAG and the Project has been analyzed to determine conformity with these projections in Section 5.9, Population, Housing, and Employment, of this EIR. Thus, the Project is consistent with, and would not conflict with, the regional blueprint prepared in accordance with SB 375 to reduce the regional share of GHG emissions attributable to the land use sector.

Off-Site Impacts

Construction of the off-site Project features (i.e., roadway improvements, water infrastructure, and utilities connections), as described in Section 4.7 of the EIR, would generate short-term GHG emissions. These construction activities and their associated emissions would be emissions would be a small part of the estimated on-site emissions, quantified above in Table 5.21-10. Upon completion of construction, the Project off-site roadway, water infrastructure, and utility improvements would not generate GHG emissions.

Impact Summary

Under AB 32, CARB, which is the agency in charge of regulating sources of emissions of GHGs in California, has been tasked with adopting regulations for reduction of GHG emission. The effects of the Project are evaluated based on whether the Project implements reduction strategies identified in applicable statutes such as AB/SB 32 and its implementing plans and regulations and other legal requirements and plans to reduce GHG to meet statutory requirements. As discussed above in Section 5.21.5, this impact analysis evaluates the Project's compliance with applicable regulatory programs designed to reduce GHG emissions and that contribute to achievement of the State's GHG reduction goals in order to

determine whether the Project would generate direct or indirect GHG emissions that may have a significant impact on the environment, a "pathway to compliance" recognized by the Supreme Court in the *Newhall* decision. As discussed under Threshold 21-1, the Project would comply with, and would be consistent with, applicable regulatory programs designed to reduce GHG emissions and would thus contribute to the achievement of AB 32's greenhouse gas reduction goals. Since the Project would comply with applicable regulatory programs designed to reduce GHG emissions, the Project-level impact related to GHG emissions could be considered less than significant under Threshold 21-1.

Furthermore, as discussed above under Threshold 21-2, this impact analysis evaluates whether the project would conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases by examining its consistency with the CCAP and SCAG's RTP/SCS, another "pathway to compliance" recognized by *Newhall*. As discussed above, the Project would be consistent with, and would not conflict with, the Los Angeles County CCAP, which meets the requirements for a programmatic climate action plan specified in Section 15183.5 of the State CEQA Guidelines, as well as the RTP/SCS, the regional sustainable communities strategy prepared pursuant to SB 375. Since the Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs, and would be consistent with, and not conflict with, an applicable plan, policy or regulation adopted for the purpose of reducing GHG emissions, the Project-level impact related to GHG emissions could be considered less than significant under Threshold 21-2.

However, climate change is a global phenomenon and the significance of greenhouse gas emissions is inherently cumulative in nature. Accordingly, the Project's impact related to GHG emissions is most appropriately considered on a cumulative level, not on a project level. As described above, the Project would emit GHGs at an estimated rate of 278,577 metric tons per year that would contribute to the global inventory of GHGs.

To date, California remains a global leader in in mandating GHG emission reductions across a broad spectrum of economic sectors, and most other nations and states have not enacted regulations similar to those adopted in California. California also already has nearly the lowest level of GHG per capita of any state. The County of Los Angeles has no jurisdictional control or responsibility for GHG reductions in other parts of California (and certainly not in the context of global action), which all contribute to climate change. In addition, the County does not have jurisdiction to enforce statewide implementation of all of the applicable GHG-reducing regulatory programs with which the Project (and other statewide projects) must comply. Although many other agencies with the necessary jurisdiction are currently taking action to reduce GHG emissions, the County cannot assure that these measures would ultimately be implemented or sufficient to address climate change. In light of these considerations, as well as the global nature climate change related to GHG emissions and the Project's total estimated GHG emissions, the Project's incremental contribution to the global GHG emissions inventory would be considered cumulatively considerable and this cumulative impact is significant and unavoidable, even though the Project satisfies several "pathways to compliance" identified by the *Newhall* court.

5.21.7 – Mitigation Measures

The mitigation measures included below were informed by a review of potentially feasible GHG reduction measures identified by staff from the Attorney General of California, included on lists of potentially feasible measures from other agencies (e.g., Air Districts, planning associations), and measures suggested by the applicant.

Because the Office of Planning and Research (OPR) and other expert agencies and scientists agree that GHG emissions are inherently a cumulative impact issue relative to global climate change, the CEQA requirements for mitigating the project's contribution to a significant cumulative impact apply. The Supreme Court in the Newhall case identified several compliance pathways for assessing the significance of GHG emissions from projects, as described above. The project complies with each applicable pathway, and thus has a less than significant impact at a project level.

At a cumulative level, the project contributes GHG emissions to the global inventory of GHG emissions which are collectively causing climate change; however, on this global scale the GHG emissions of a single development project are insufficient to cause a significant adverse global climate change impact since all of California's anthropomorphic activities taken together account for only about 1% of global anthropomorphic GHG emissions based on US EPA data (2015). This conclusion that the project alone does not cause or substantially contribute to a significant adverse cumulative GHG impact is further supported by the fact that this project is designed to accommodate forecast population and economic growth based on growth allocations made by the state Department of Community Development, and assigned by regions and local jurisdictions as part of the Regional Housing Needs Assessment and Sustainable Communities Strategies programs described further in Section 5.9, and the project does not itself cause this population or economic growth. In fact, if this forecast growth does not occur on the Project site, it is likely to occur in other locations where per capita GHG emissions are equal to or higher than average per capita emissions in California. Per capita GHG emissions can vary by local jurisdiction, but locations with the lowest per capita emissions (San Francisco and New York City) also have housing costs that are among the highest in the nation as well as the state. Due to the widespread shortage and very high cost of California housing, numerous studies have confirmed that over 600,000 people have moved from California to other states over the past several years, and since most of those states (e.g., Texas, Arizona, Nevada) have much higher per capita GHG emissions than California the net effect of continuing to provide insufficient housing opportunities for California is to cause a net increase in global GHG for people who relocate to states with more housing opportunities.

Finally, courts have consistently held that single projects cannot be required to bear a greater than proportional share of mitigating a cumulative significant impact. Because GHG emissions from transportation, water and waste management and use, heating and cooling of buildings, and a myriad of other activities are common to all new and modified development projects, and are common attributes of simply residing, working or producing goods or services in California, the feasibility of the mitigation measures required for this project must be commensurate with a fair share allocation and not with a hypothetical "net

zero" or "net reduction" threshold. Within this cumulative impact mitigation measure framework, all feasible mitigation measures to reduce the Project's GHG emissions impacts have been required and are described below:

MM 21-1 The Project Applicant/Developer shall provide the County with plans and specifications that demonstrate 50 percent of the Project's anticipated electrical energy demand at buildout shall be satisfied from on-site renewable energy generation. "Anticipated electrical energy demand" shall be determined on the basis of the anticipated loads for each building as shown in the reports submitted at the time of building permit application pursuant to the Building Energy Efficiency Standards of Title 24. "On-site renewable energy generation" includes, but is not limited to, solar, wind, geothermal, biofuel and hydroelectric systems. These systems shall be installed in connection with the development of one or more of the following: residential units, nonresidential buildings, public buildings, or Specific Plan utility facilities located either within the Specific Plan area or within its immediate vicinity.

MM 21-2 The Project's plans and specifications shall demonstrate compliance with California Green Building Standards (CALGreen) Code voluntary measure A4.203.1.2.1 Tier 1 for newly-constructed low-rise residential buildings. Therefore, the energy efficiency of these buildings would exceed 2016 Title 24 requirements by 15 percent. Low rise buildings are three stories or less. The Project shall incorporate the Green Development Program (Centennial Specific Plan, Appendix 2A), and the Project Applicant/Developer shall be responsible for the implementation of this requirement, which may include energy reduction measures such as use of high performance glazing, radiant heat roof barriers, insulation of all pipes, programmable thermostats, fluorescent and LED bulbs, solar access, sealed ducts, strategic placement of trees and other shading devices. All single-family homebuyers shall have the option to include a photovoltaic array system.

MM 21-3 The Project's plans and specifications shall demonstrate compliance with CALGreen voluntary measure A5.203.1.2.1 Tier 1 for nonresidential buildings (e.g. hotel, high-rise residential), thereby exceeding the 2016 Title 24 energy efficiency requirements for these buildings by 10 percent. The Project shall incorporate the Green Development Program (*Centennial Specific Plan*, Appendix 2A), and the Project Applicant/Developer shall be responsible for the implementation of this requirement, which may include energy reduction measures such as high performance glazing, radiant heat roof barriers, high-efficient HVAC with hot-gas reheat, insulation of all pipes, programmable thermostats, fluorescent and LED bulbs, solar access, sealed ducts, zero use of CFC refrigerants in commercial buildings, strategic placement of trees, and other shading devices. Commercial structures shall include passive solar design techniques, such as a north-south panel orientation on buildings, and shall install operable windows designed to maximize natural ventilation by

opening into prevailing west winds at inlets and away outlets, thereby reducing use of interior climate controls.

MM 21-4 The Project Applicant/Developer shall require, in contract specifications, that contractors limit construction equipment idling to 3 minutes and include a program to ensure that equipment operators comply with the 3-minute limit.

MM 21-5 The Project Applicant/Developer shall provide plans and specifications to the County demonstrating that all ~~a minimum of 70 percent of~~ public and community pools and spas shall be equipped with active solar heating systems where heating is necessary or desired. The Project Applicant/Developer shall provide the proposed plan for compliance with this provision prior to obtaining a permit for the pool.

MM 21-6 Deeds, CC&Rs or similar legal documents shall contain the following requirement: The owners of all single-family and multi-family residential units shall be required, upon resale, to present to the buyer a written energy audit checklist prepared by a qualified third party at the time the seller provides the buyer with the Real Estate Transfer Disclosure Statement required by California Civil Code, Section 1102 et seq. The energy audit checklist shall certify that all HVAC systems, thermostats, appliances, windows and swimming pools (if applicable) are the same as those originally installed or, if changed, otherwise comply with Centennial's Green Development Program. All residential pool covers shall be removable, and shall not be automatic retractable covers.

The CC&Rs of the master homeowners association or other applicable association shall require compliance with the provisions of this measure and shall provide notice to individual owners of the resale energy audit checklist requirement. The master homeowners association or other applicable association shall monitor compliance and provide the County with an annual report of compliance with this measure.

MM 21-7 Deeds, CC&Rs, or similar legal documents shall contain the following requirement: For nonresidential buildings, within ninety (90) days after the end of the first full calendar year following the issuance of the certificate of occupancy and within ninety (90) days after each five year period thereafter, the owner or tenant in possession thereof shall submit to the master commercial owners association or other applicable association a report prepared by the owner or a qualified, independent third party that evaluates whether all major building systems such as heat furnace, air conditioner, and other mechanical fixtures are working within the design standards established for each system. The master commercial owners association or other applicable association shall monitor compliance and provide the County with an annual report of compliance with this measure.

MM 21-8 Energy efficient major appliances and HVAC systems that meet the more stringent of applicable California Energy Commission (CEC) requirements or ENERGY STAR requirements, or equivalent, shall be ~~exclusively~~ offered by residential builders. Major appliances subject to this requirement include dishwashers, clothes washers, refrigerators, and room air conditioners.

MM 21-9 The Project Applicant/Developer shall provide plans and specifications to the County that have been prepared in accordance with the Project Water Purveyor or alternate qualified public utility district requirements and standards, demonstrating that the Project's wastewater reclamation facilities (WRFs) shall ~~include equipment to~~ capture and reuse biogas for energy production.

MM 21-10 The Project Applicant/Developer shall provide plans and specifications to the County demonstrating that nonresidential or multi-family buildings shall be constructed with recycled water infrastructure to serve common areas for these facilities, except where prohibited by law. To the extent recycled water is produced within the Project and available, recycled water shall be used for landscape irrigation within those common areas. Compliance with these measures shall be established prior to the issuance of a construction permit for nonresidential and multi-family facilities and at the time of County approval of final landscaping plans submitted by the Project Applicant/Developer after final map recordation for homeowners association common areas. Covenants, conditions and restrictions (CC&Rs) shall require the owners of such common areas to maintain, repair and replace irrigation systems and plantings in accordance with County approved plans.

MM 21-11 The Project Applicant/Developer shall provide plans and specifications to the County demonstrating that non-residential building shall be constructed with indoor plumbing fixtures and fixture fittings that would reduce the overall use of potable water within the building by 12 percent, consistent with 2016 CALGreen Tier 1 non-residential voluntary measures as prescribed in Section A5.303.2.3.1 of the code.

MM 21-12 The Project Applicant/Developer shall provide plans and specifications to the County demonstrating that single or multi-family residential building shall be constructed with kitchen faucets and appliances that comply with 2016 CALGreen code residential voluntary measures specified in Sections A4.303.1 and A4.303.3 of the code.

MM 21-13 The outdoor residential (single-family and multi-family) water budget for water-budget-based ratemaking shall be based on having no more than 25 percent turf grass allowed in landscaped areas of single-family detached residential front yards and multi-family residential common areas.

MM 21-14 Ten percent of all homes in Centennial communities that permit housing, with the exception of the lowest density area (Community 8-2) will be affordable,

in conformance with the Affordable Housing Implementation Plan (see Appendix 3-H of the *Centennial Specific Plan*).

MM 21-15 The Project Applicant/Developer shall provide plans and specifications to the County demonstrating that one 208/240 VAC receptacle that may be used for charging electric vehicles, shall be installed in each detached and attached single-family residence in a manner consistent with 2016 CALGreen Code Voluntary Tier 1 Section A4.106.4.1. The installation shall comply with requirements of the 2016 CALGreen Code Section 4.106.4.1, or the most applicable code at the time of construction. The Project Applicant/Developer shall provide a further credit of $500 to 50 percent of future homeowners (as requested by homeowner) to pay for the type of charging device then in use for electric vehicles or, with County approval, to pay for other energy conservation uses. The availability of this EV incentive benefit shall be disclosed and promoted at the time of initial sale of single family homes and shall thereafter be promoted by the TMA on its website.

MM 21-16 The Project Applicant/Developer shall provide plans and specifications to the County demonstrating compliance with the Electric Vehicle Supply (EVS) charging station measures specified in MM 11-4. If and to the extent subsequently approved by the County, compliant with state laws, and resulting in no new significant impacts to the environment following County review and approval, EVS charging stations may be replaced by "alternative energy fueling stations" which may include other types of electric vehicle charging technology (e.g., operating at higher or lower voltages), or alternative vehicular fuel technology that results in zero or near zero (as defined by CARB) GHG emission such as hydrogen fuel cells, biofuels, or other qualifying fuel technologies. ~~that "alternative energy fueling stations" shall be installed as follows. An "alternative energy vehicle fueling station" is a 208/240 VAC electrical vehicle charging station or a station providing another new or improved technology (e.g. compressed natural gas (CNG) and hydrogen fuel cell) that provides refueling for vehicles that do not use fossil fuel.~~ An electric charging station shall allow for simultaneous charging of two electric vehicles.

- Business Park and Institutional land use designations shall provide a minimum of one alternative energy vehicle fueling station on site for the first 50,000 square feet of usable floor space and additional alternative energy vehicle fueling stations for each additional 50,000 square feet of usable floor space thereafter.
- Multi-family residential buildings of at least seventeen ~~20~~ (17) residential units shall provide a minimum of one alternative energy vehicle fueling station for the first ~~twenty~~ seventeen (~~20~~ 17) residential units and an additional alternative energy vehicle fueling station for each additional ~~twenty~~ seventeen (~~20~~ 17) residential units thereafter.

- The Town Center and each Village Center shall provide a minimum of one alternative energy vehicle charging station.
- Designated Transit Hubs shall provide a minimum of one alternative energy vehicle charging station.

MM 21-17 The Project Applicant/Developer shall provide plans and specifications to the County demonstrating that the following features have been incorporated into the building designs for non-residential buildings:

- Bicycle parking spaces at a rate of 5 percent of minimum required vehicle parking spaces for non-residential land uses.
- Preferential parking for low-emitting, fuel-efficient, and carpool/van vehicles shall be provided as specified in Section A5.106.5.1, Nonresidential Voluntary Measures, of the CALGreen Code.

MM 21-18 The Project Applicant/Developer shall provide plans and specifications to the County demonstrating that the following features have been incorporated into the building designs or specifications for multi-family residential buildings:

- Visitor parking shall include preferentially located parking spaces for ~~alternative-fueled~~ electric vehicles.
- Bicycle parking shall be provided as specified in Section A4.106.9, Residential Voluntary Measures, of the CALGreen Code or as required by County Code Section 22.52.1225B, whichever is more stringent.

MM 21-19 For parking structures and parking lots with 20 or more parking spaces that serve uses other than residential or nonresidential buildings (e.g., trailhead, park), and parking structures and parking lots that serve multifamily residential buildings with 17 or more multifamily units, the Project Applicant/Developer shall provide plans and specifications to the County demonstrating that the following features have been incorporated into the parking facility:

- The parking facility shall include a minimum of five percent preferentially located parking spaces for ~~alternative-fueled (~~electric~~, natural gas, or similar low-emitting technology)~~ vehicles.
- Five percent of ~~T~~the total number of parking spaces provided in the parking facility, but in no case less than one, shall be Electric Vehicle Parking Spaces (EV Spaces), as defined in CALGreen Code Section 202, capable of supporting future Electric Vehicle Supply Equipment (EVSE), as defined in CALGreen Code Section 202 ~~include at least one electric vehicle charging station. Electrical lines shall be designed and sized to add additional charging stations for up to three percent of the total parking spaces when a demand is demonstrated~~. Calculations for the required number of EV Spaces shall be rounded up to the nearest

whole number and ~~T~~the design and installation of each EV space shall be consistent with Section A4.106.8.2, Residential Voluntary Measures, and Section 4.106.4.2, of the CALGreen Code as follows:~~.~~

Single charging space requirements. When only a single EV Space is required, install a listed raceway capable of accommodating a dedicated branch circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall be securely fastened at the main service or subpanel and shall terminate in close proximity to the proposed location of the charging system into a listed cabinet, box or enclosure.

Multiple charging spaces required. When multiple EV Spaces are required, plans shall include the location(s) and type of EVSE, raceway method(s), wiring schematics and electrical calculations to verify that the electrical system has sufficient capacity to charge simultaneously all the electrical vehicles at all designated EV Spaces at their full rated amperage. Plan design shall be based on Level 2 EVSE at its maximum operating ampacity. Only underground raceways and related underground equipment are required to be installed at the time of construction.

- For residential parking facilities, bicycle parking shall be provided as specified in Section A4.106.9, Residential Voluntary Measures, of the CALGreen code or as required by County Code Section 22.52.1225B, whichever is more stringent.

MM 21-20 The Project Applicant/Developer shall ensure that the implementation of the Green Development Program ~~takes into account compliance with the~~ that complies with all applicable legal requirements, including but not limited to the following regulations (as may be amended):

1. Regulations that are quantified inputs into the CalEEMod analysis, resulting in GHG Reductions:
    a. Pavley Motor Vehicle Standards (AB 1493)
    b. Low Carbon Fuel Standard (California Code of Regulations, Title 17, Division 3, Chapter 1, Subchapter 10, Article 4, Subarticle 7, Section 95480 et seq.)
    c. Title 24 (part 6 [Energy Code] and part 11 [CALGreen Code]) of the California Code of Regulations
    d. Renewable Portfolio Standard (SB X1 2 and SB 350)
    e. Solid Waste Diversion (AB 341)
    f. Statewide reduction in potable urban water usage of 25 percent relative to water use in 2013 (Executive Order B-29-15)

g. Model Water Efficient Landscape Ordinance (MWELO) (California Code of Regulations, Title 23, Division 2, Chapter 2.7)

h. Los Angeles Tree Planting Ordinance (Los Angeles County Code, Title 22, Division 1, Chapter 22, Part 20, Sections 22.52.2100 et seq.)

i. Los Angeles County Green Building Standards Code (Los Angeles County Code, Title 31, Chapter 1, Sections 100 et seq.)

j. California Water Code (California Code of Regulations, Division 6, Part 2.10, Sections 10910–10915)

k. Los Angeles County Community Climate Action Plan

2. Regulations that are not quantified inputs into the CalEEMod analysis, but should be considered for incorporation as appropriate:

a. EPA and NHTSA GHG and CAFE standards for passenger cars, light-duty trucks, and medium-duty passenger vehicles (75 FR 25324–25728 and 77 FR 62624–63200) and for medium- and heavy-duty vehicles (76 FR 57106–57513)

b. Cap-and-Trade Program for Electricity, Stationary Sources, and Fuels (California Code of Regulations, Title 17, Division 3, Chapter 1, Subchapter 10, Article 5, Section 95801 et seq.)

c. Advanced Clean Cars Program (California Code of Regulations, Title 13, Division 3, Chapter 1, Articles 1, 2, 6 (parts); Chapter 2, Articles 1, 2.1, 2.3, 2.4 (parts); Chapter 4.4 (parts); Chapter 8 (parts).

d. Under Inflated Vehicle Tires (California Code of Regulations, Title 17, Division 3, Chapter 1, Subchapter 10, Article 4, Subarticle 8, Section 95550 et seq.)

e. Heavy-Duty Vehicle Greenhouse Gas Emission Reduction Regulation (California Code of Regulations, Title 17, Division 3, Chapter 1, Subchapter 10, Article 4, Subarticle 1, Section 95300 et seq.)

f. Management of High Global Warming Potential Refrigerants for Stationary Sources (California Code of Regulations, Title 17, Division 3, Chapter 1, Subchapter 10, Article 4, Subarticle 5.1, Section 95380 et seq.)

g. Small Containers of Automotive Refrigerant (California Code of Regulations, Title 17, Division 3, Chapter 1, Subchapter 10, Article 4, Subarticle 5, Section 95360 et seq.)

h. High-Global Warming Potential Greenhouse Gases in Consumer Products (California Code of Regulations, Title 17, Division 3, Chapter 1, Subchapter 8.5, Article 2)

i. CALGreen Code as Adopted by the Building Standards Commission (California Code of Regulations, Title 24, Part 11 Emergency Building Standard DSA-SS EF-02/15)

j. Natural Gas Cooking Stoves and Fireplaces (SCAQMD Rule 445)

MM 21-21 The Project Applicant/Developer shall require contractors to use locally available and recycled building materials, provided such materials meet all applicable Building Code and other requirements, and are readily available and comparably priced to assure that such materials do not increase the cost and decrease the affordability of housing or community infrastructure.

MM 21-22 The Project parking lots shall be designed to reduce vehicle queuing and improve pedestrian safety. Parking lot access designs shall include self-enforcement features for reducing the speeds on driveways, such as speed bumps or curved driveways. The parking lots shall include clearly marked pedestrian pathways connecting building entrances to parking, sidewalk, and transit drop-off/pick-up locations.

5.21.8 – Level of Significance After Mitigation

Although the Project would comply with various "pathways to compliance" for CEQA GHG analysis identified by the *Newhall* court, as discussed in Sections 5.21.6, even with implementation of all reasonable and feasible mitigation measures, as described in Section 5.21.7, the Project's climate change impacts would remain significant and unavoidable.

5.21.9 – References

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Attachment:

Updated GHG Report

Updated Greenhouse Gas Calculations for the Centennial Project Final Environmental Impact Report

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ATTACHMENTS

Attachment

A GHG Reducing Mitigation Measures in Centennial Project Environmental Impact Report

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1.0 SUMMARY

This Report provides an additional analysis of greenhouse gas (GHG) emissions that would be generated by the proposed Centennial Specific Plan (the "Project") under full buildout conditions. This analysis compares the Project's GHG emissions calculated in Section 5.21, Climate Change, of the Draft Environmental Impact Report (DEIR) ("DEIR Quantified GHG Emissions") with an updated analysis completed at County request ("Updated GHG Calculations"). The DEIR Quantified GHG Emissions, along with the DEIR's overall analysis of GHG impacts, was consistent with the GHG compliance pathways required under the California Environmental Quality Act (CEQA) identified by the California Supreme Court in the *Newhall* case (*Center for Biological Diversity v California Dept. of Fish and Wildlife* [2015] 62 Cal.4th 204), and did not generally rely on quantifying all GHG reductions from Project mitigation measures or applicable legal requirements.

As presented below, the Updated GHG Calculations shows that Project-specific GHG emissions will be approximately 35 percent lower than the quantitative estimates included in the DEIR, based on GHG legal reduction mandates that were not in effect when the DEIR GHG emissions were calculated, more advanced GHG quantification methodologies, including newer versions of GHG emission models, and the quantification of GHG emissions from Project mitigation measures that reduce GHG emissions. The Updated GHG Calculations include: (1) emissions estimates from the most current version (16.3.2) of the California Emissions Estimator Model (CalEEMod); (2) updated information regarding applicable electric vehicle (EV) adoption rates; (3) estimated internal and external trip reductions attributable to the Project's single occupancy vehicle (SOV) mitigation measures; (4) updated estimates of the Project's water and wastewater energy use and emissions; and (5) revised estimates of the Project's solid waste GHG emissions based on applicable landfill diversion mitigation requirements. The analysis results include the following:

- Total Project GHG emissions in the Updated GHG Calculations are 157,642 metric tons of carbon dioxide equivalent per year ($MTCO_2e$/yr), a reduction of -86,736 $MTCO_2e$/yr (approximately 35 percent) from the DEIR Quantified GHG Emissions of 244,379 $MTCO_2e$/yr. See Table 1.
- Due to the combination of quantified EV charging demand, which increases Project electricity use, and reductions in electricity use associated with the new 2019 Title 24 Building Energy Efficiency Standards, which decreases Project electricity use, the Updated GHG Calculations include an overall increase GHG emissions from the use of electrical power when compared to the DEIR Quantified GHG Emissions. However, a higher rate of EV adoption reduces mobile source GHG emissions by -83,897 $MTCO_2e$/yr from the DEIR Quantified GHG Emissions. See Tables 1 and 2.
- Approximately 96 percent (150,808 $MTCO_2e$/yr) of the Updated GHG Calculations emissions are covered by, and subject to, the purchase of emission allowances under the new, expanded state Cap and Trade program approved by the Legislature after the DEIR was issued, and signed into law in 2017 (Assembly Bill 398 [AB 398]). The Cap and Trade program was designed to comprehensively regulate fossil fuels (from "wells to wheels" – from production, through refining, through ultimate consumption) and is expected to raise gasoline prices within a range of approximately 15 to 63 cents per gallon by 2021, and from 24 to 73 cents per gallon by 2031, according to the non-partisan California Legislative Analyst Office.[1] Compliance with the Cap and Trade program was upheld as a lawful CEQA mitigation measure to reduce GHG emissions to a less-than-significant-level for fossil fuels used by a refinery project for both direct refinery operations as well as indirect electricity consumption-related GHG emissions in a recent CEQA appellate court case,

[1] http://www.lao.ca.gov/letters/2017/fong-fuels-cap-and-trade.pdf

Association of Irritated Residents v. Kern County Board of Supervisors, et al. (Alon USA Energy, Inc., et al., Real Parties in Interest) (2017) 17 Cal.App.5th 708. The California Supreme Court declined to reverse, or de-publish, this case. The California Air Resources Board (CARB) has also determined that existing California law provides sufficient authority to extend the Cap and Trade program as required to meet state GHG reduction objectives.[2] See Table 3.

- GHG emissions from all Project electrical power consumption in the Updated GHG Calculations, including EV charging requirements, are 32,173 $MTCO_2e$/yr. These emissions are significantly less than the net -86,736 $MTCO_2e$/yr reduction from the DEIR Quantified GHG Emissions and the Updated GHG Calculations. Even without consideration of GHG emissions reductions associated with regulations (see Table 1), the Project's MMs account for -34,412 of the $MTCO_2e$/yr of the net reduction in GHG emissions, which is greater than the emissions associated with Project's electricity usage. Therefore, the Project achieves the "net zero carbon from the electric sector" commitment by assuring that GHG emissions from Project electricity consumption are more than offset by GHG reductions. See Table 4.
- The Project's GHG Efficiency based on the estimated service population decreased from 3.02 as presented in the DEIR Quantified GHG Emissions to 1.93 as calculated in the Updated GHG Calculations. The CARB adopted the 2017 Climate Change Scoping Plan, which recommends statewide targets of no more than 6 $MTCO_2e$ per capita by 2030, and no more than 2 $MTCO_2e$ per capita by 2050.[3] The Project's GHG Efficiency of 1.93 at Project buildout is below the Scoping Plan's 2030 and 2050 per capita targets. See Table 5.

Attachment A is included in this Report, which identifies certain mitigation measures (MM) from Appendix 2.0-C.Rev, Mitigation Monitoring and Reporting Program (Revised) in the Final EIR, which would directly or indirectly contribute to reductions in GHG emissions. MMs that contribute to quantifiable reductions in the Updated GHG Calculations are noted in Attachment A, as are those MMs that indirectly support the implementation and management of the quantified measures or are expected to further reduce Project-related GHG emissions.

The air pollutant emissions presented in the DEIR Quantified GHG Emissions and the Updated GHG Calculations are based on the California Emissions Estimator Model (CalEEMod). This model was developed by the California Air Pollution Control Officers Association with participation from numerous air pollution control districts within California. Emissions developed within CalEEMod represent estimates based on the best available information. These emissions and emissions reductions should be considered an approximation of the magnitude of emissions associated with an individual project.

[2] Respondents Brief of California Air Resources Board et al., *California Chamber of Commerce et al. v. California Air Resources Board et al.*, Case No. C075930, California Court of Appeals, Third Appellate District, filed by the California Attorney General on February 15, 2015.

[3] California Air Resource Board, November 2017, available at https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf, accessed May 2018.

2.0 UPDATED GHG CALCULATIONS

Table 1 compares the DEIR Quantified GHG Emissions with the results of the Updated GHG Calculations. Total Project emissions are -86,736 $MTCO_2e$/yr lower in the Updated GHG Calculations than in the DEIR Quantified GHG Emissions.

TABLE 1
DEIR QUANTIFIED GHG EMISSIONS AND UPDATED GHG CALCULATIONS
($MTCO_2E$/YEAR)

GHG Emission Sources	DEIR Quantified GHG Emissions	Reductions		Net Change in GHG Emissions	Updated GHG Calculations
		From Regulations and CalEEMod Update	*From Mitigation Measures*		
Mobile	160,904	-52,694[a]	-31,203[b]	-83,897	77,007
Energy	49,414	5,584	50	5,634	55,047
Electrical Power	*23,276*	*5,806*[c]	*50*[d]	*5,856*	*29,132*
Natural Gas	*26,137*	*-222*	*0*	*-222*	*25,915*
Water and Wastewater	7,387	0	-3,184[e]	-3,184	4,203
Solid Waste	10,214	-5,107[f]	0	-5,107	5,107
Area	11,297	0	-74[g]	-74	11,223
Construction	4,490	0	0	0	4,490
Vegetation	673	-108[h]	0	-108	565
Total Emissions	**244,379**	**-52,324**	**-34,412**	**-86,736**	**157,642**

Sources: DEIR Quantified GHG Emissions from DEIR Section 5.21; Updated GHG Calculations from Psomas using CalEEMod version 16.3.2 (June 2018).

a Reductions assume that 80 percent of the GHG emissions reductions attributable to the utilization of EVs at Project buildout are due to regulatory, CalEEMod and EV market development factors (see "Mobile Emissions" discussion below).

b Reductions attributable to MM 10-1, MM 10-25, MM 10-26, MM 21-14, MM 21-22, and MM 14-11, as well as 20 percent of the reductions attributable to the utilization of EVs at Project buildout (see "Mobile Emissions" discussion below).

c Overall increases attributable to combination of EV charging infrastructure emissions (increase of 11,224 $MTCO_2e$/yr allocated at 80 percent per footnote "a" above, and due to MM 11-4, MM 11-6, MM 21-15, MM 21-16, MM 21-18 and MM 21-19). GHG decreased emissions are also included, due to 2019 Title 24 Standards (reductions of -3,173 $MTCO_2e$/yr).

d Overall increases attributable to combination of EV charging infrastructure emissions (increase of 11,224 $MTCO_2e$/yr allocated at 20 percent per footnote "b" above), and due to MMs 13-2 and 13-6 (reduction of -109 $MTCO_2e$/yr) and MM 21-1 (-2,086 $MTCO_2e$/yr).

e Reductions attributable to MM 18-1, MM 21-9, and MM 21-13.

f Reductions attributable to MM 17-10 and attributed to regulatory factors.

g Reductions attributable to MM 11-3 and electric landscape equipment (Green Development Program).

h Reductions attributable to MM 7-11, MM 7-12 and MM 21-20 and attributed to regulatory factors.

Note: Total emissions may not add up exactly due to rounding.

Table 1 shows that Project GHG emissions are primarily reduced from the DEIR Quantified GHG Emissions levels in the mobile (-83,897 $MTCO_2e$/yr), water and wastewater (-3,184 $MTCO_2e$/yr), and solid waste (-5,107 $MTCO_2e$/yr) source categories. Due to the quantification of the EV charging demand, GHG emissions from electrical power consumption increased from the DEIR Quantified GHG Emissions levels in the electrical power source category. The emissions calculations for each of these categories are discussed in more detail below.

2.1 MOBILE EMISSIONS

The mobile GHG emissions estimates in the Updated GHG Calculations shown in Table 1 primarily reflect: (1) an increase in EV adoption rate from 4 percent to 50 percent at Project buildout (i.e., over at least 20 years); and (2) internal and external trip reductions from achieving

the required minimum SOV use levels by (MM 10-25). In addition, smaller mobile source reductions are attributable to the quantification of the Project's mitigations for affordable housing (MM 21-14), pedestrian facilities (MMs 21-22, 14-11, and 10-26), and telecommuting attributes (MM 10-1).

The CalEEMod default value for EV use is approximately 4 percent of all vehicles, which is a level that does not reflect reasonably foreseeable future EV adoption rates based on ongoing public and private sector efforts to develop and deploy EV technologies and products. Psomas has reviewed third-party, independent projections of EV adoption over time, including studies published by Bloomberg New Energy Finance (BNEF),[4] the International Monetary Fund (IMF),[5] the University of California Davis Institute for Transportation and Development Policy,[6] and the University of California Berkeley Center for Entrepreneurship and Technology[7].

Global projections in the BNEF report show that by 2040, it is expected that 55 percent of new car sales will be electric. The University of California, Berkeley report's estimates for EV adoption in the U.S. show EVs achieving up to "a 46% market share by 2030".[8] The IMF working paper shows that the share of EVs in the U.S. vehicle stock would be 30 percent by 2027, and by 2042 the share would be over 90 percent.[9] Although the projections from each report vary, they all point toward high levels of EV sales and adoption in the U.S. in the near future. Importantly, these reports are focused on EV sales nationwide, and are assumed to be a conservative estimate for California's electric car sales.

Projections for California also show increases in EV utilization, with California leading in U.S. for Zero-Emission Vehicle (ZEV) sales. Of all ZEVs sold in 2017 in the U.S. (through October 2017), California sales made up more than half of all U.S. sales, and as of January 2018, the number of ZEVs in California made up half of the total ZEVs in the U.S.[10] In addition to the existing trend in increasing EV market share, new state law would *require* a rapid increase in EV stock state-wide. Executive Order B-48-18, which went into effect January 2018, sets a target of 5 million ZEVs in California by 2030.[11] According to CARB, this new order would require 40 percent of all vehicles sold in 2030 in California to be clean.[12]

Based on this review, an EV use rate of 50 percent was determined to more appropriately characterize the Project's EV utilization at Specific Plan buildout. The inclusion of a 50 percent EV utilization rate accounts for approximately 78.5 percent of the Project's total -83,897 MTCO2e/yr reductions for mobile emissions when compared to the DEIR Quantified GHG

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4 Bloomberg New Energy Finance, Electric Vehicle Outlook, Executive Summary, 2018, available at https://bnef.turtl.co/story/evo2018**Error! Hyperlink reference not valid.**, accessed June 2018.

5 R. Cherif et al, Riding the Energy Transition: Oil Beyond 2040, International Monetary Fund Working Paper No. 17/120, May 22, 2017, available at https://www.imf.org/en/Publications/WP/Issues/2017/05/22/Riding-the-Energy-Transition-Oil-Beyond-2040-44932, accessed May 2018.

6 L. Fulton et al., Three Revolutions in Urban Transportation, University of California at Davis Institute for Transportation and Development Policy, May 3, 2017, available at https://www.itdp.org/2017/05/03/3rs-in-urban-transport/, accessed May 2018.

7 T, Becker et al., Electric Vehicles in the United States A New Model with Forecasts to 2030, U.C. Berkeley Center for Entrepreneurship & Technology, Technical Brief Number: 2009.1.v.2.0, August 24, 2009, available at http://globaltrends.thedialogue.org/institution/university-of-california-berkeley-center-for-entrepreneurship-technology-cet/, accessed May 2018.

8 T, Becker et al. 2009

9 R. Cherif et al. 2017

10 Next 10, The Road Ahead for Zero-Emission Vehicles in California, January 2018, available at http://next10.org/sites/default/files/ca-zev-brief.pdf, accessed June 2018.

11 State of California, Governor Brown Takes Action to Increase Zero-Emission Vehicles, Fund New Climate Investments, January 2018, available at https://www.gov.ca.gov/2018/01/26/governor-brown-takes-action-to-increase-zero-emission-vehicles-fund-new-climate-investments/.

12 J.J. Cooper, California governor pushes for 5 million zero-emission cars, January 2018, available at https://apnews.com/6bd313487476449bb92bec62f8fa3626.

Emissions. As shown in Attachment A of this Report, Project MM 11-4, MM 21-15, MM 21-16, and MM 21-19 require that EV charging infrastructure and other EV adoption incentives be implemented throughout the development area. Other recently approved projects, such as Newhall Ranch, have determined that Project-specific mitigation measures would account for a 50 percent EV adoption rate at buildout. EV adoption rates for specific projects will vary in accordance with site characteristics, demographics and income levels, EV-related incentives and mitigation requirements, and regulatory and EV market developments. Based on these factors, the Project MMs are estimated to account for approximately 20 percent of the total EV use rate at Specific Plan buildout and 80 percent is attributed to regulatory, CalEEMod and EV market development factors (see Table 1). Attachment A also includes modifications to mitigation measures, shown with underscored text for additions and strike-outs for deletions, that further clarify and strengthen EV incentives and related support at the Project site, as well as other GHG reduction measures.

As discussed in DEIR Section 5.21, Climate Change, the DEIR Quantified GHG Emissions do not include trip reductions from achieving the minimum internal and peak period external SOV use rates (MM 10-25) in the revised Mitigation, Monitoring and Reporting Program (MMRP) (see Final EIR Appendix 2.0-C.Rev). MM 10-25 requires the implementation of transit and transportation measures to ensure that a minimum of 30 percent of total daily internal on-site trips and a minimum of 20 percent of total off-site peak hour commutes to and from the Project site are completed by using transit modes other than SOVs. The Project's traffic consultant (Stantec) estimated the total trip reductions that would occur from limiting SOV use to 70 percent of internal trips and 80 percent of peak period external trips, in accordance with MM 10-25. Non-SOV internal trips were allocated to a range of alternative transportation modes, including high occupancy vehicles (HOVs), carpools, vanpools, and walking, biking and neighborhood electric vehicles. Non-SOV external trips were allocated to a range of HOVs, carpools, vanpools.

The analysis determined that total Project passenger vehicle trips would be reduced by an average of 10 percent from the levels in the DEIR Quantified GHG Emissions by meeting the minimum internal and external SOV requirements in MM 10-25. Because 96 percent of all Project vehicle trips are anticipated to be passenger vehicle trips that are subject to the SOV use reduction, while the remaining 4 percent are comprised of heavier duty commercial and similar vehicles that are not subject to this reduction, the number of Project trips in the Updated GHG Calculations was reduced by 9.6 percent. Therefore, MM 10-25 accounts for approximately 18.5 percent of the Projects' total -83,897 MTCO2e/yr reductions for mobile emissions when compared to the DEIR Quantified GHG Emissions.

CalEEMod includes input options for a project's level of affordable housing, the implementation of pedestrian facilities and telecommuting rates, which are all calculated internally in CalEEMod using quantification criteria developed by the California Air Pollution Control Officers Association (CAPCOA). The Updated GHG Calculations include CalEEMod inputs of the Project's 10 percent affordable housing commitment (MM 21-14), Project-wide pedestrian/bicycle facilities (MMs 21-22, 14-1, and 10-26), and an assumed 3 percent telecommuting rate (MM 10-1). These MMs account for approximately 3.0 percent of the Projects' total -83,897 MTCO2e/yr reductions for mobile emissions when compared to the DEIR Quantified GHG Emissions. MMs 14-3 through 14-5 and MM 15-2 support the implementation and management of these quantified MMs, but were not directly quantified.

2.2 ENERGY

The electrical power emission estimates in the Updated GHG Calculations reflect an overall increase in electricity demand due to the greater use of EVs at Project buildout. The current version of CalEEMod does not account for EV charging emissions. Therefore, Psomas estimated GHG emissions from the additional electricity demand required to charge the Project's EVs by

using: (a) the Southern California Edison GHG emission rate per unit of electrical power generation with the implementation of the state's legally mandated 50 percent renewable portfolio standard by 2030; (b) published estimates of EV power consumption per mile;[13] and (c) the total miles traveled by the Project's EVs based on the number of trips and average distance per trip with 50 percent EV adoption at buildout.

GHG emissions associated with MMs 11-4, 11-6, 21-15, 21-16, 21-18 and 21-19 for EV charging stations are included in the electricity consumption rates and GHG electrical emissions in Table 1 for the Updated GHG Calculations. MM 11-5 and MM 21-17 support the implementation and management of these quantified MMs, but were not directly quantified.

As shown in Table 1, approximately 80 percent of the GHG emissions reductions associated with a 50 percent anticipated EV utilization rate at Project buildout (-52,694 $MTCO_2e$/yr) are assumed to occur due to regulations and EV market forces, while approximately 20 percent of the GHG emissions reductions are assumed to be directly attributable to the Project's EV charging station infrastructure (see MMs 11-4, 11-6, 21-15, 21-16, 21-18 and 21-19). Similarly, approximately 80 percent of the GHG emissions increases associated EV charging station infrastructure (8,979 $MTCO_2e$/yr) are assumed to occur due to regulations and market forces affected EV adoption rates at Specific Plan buildout, while approximately 20 percent of the GHG emissions increases are assumed to be directly attributable to the Project's MMs pertaining to EV charging station infrastructure and EV adoption incentives (2,245 $MTCO_2e$/yr). This is a conservative assumption because the installation of EV charging infrastructure, including charger-ready 208/240 volt connections and preferentially-located EV parking spaces in accordance with Project MM 11-4, MM 21-15, MM 21-16, and MM 21-19 (see Attachment A) would increase the likelihood that the projected level of EV use will occur by Project buildout over at least the next 20 years. The provision of EV charging infrastructure as required by the Project's MMs is an essential requirement for achieving a successful transition to high rates of EV utilization.

Table 2 includes the changes in electricity and natural gas demands between the DEIR Quantified GHG Emissions and the Updated GHG Calculations. Three primary factors contribute to the changes shown in Table 2.

- First, 2019 Title 24 Building Energy Efficiency Standards, which were adopted after the DEIR analysis was completed, reduce the Project's electrical consumption estimates for low-density residential and non-residential uses when compared to the 2016 Title 24 Standards, and when compared to MMs 21-2 and 21-3, which required improvements beyond 2016 Title 24 Standards. GHG emissions reductions associated with 2019 Title 24 Standards are -3,173 $MTCO_2e$/yr. The Project includes MM 21-8 that requires ENERGY STAR appliances, which would result in additional reductions in electricity consumption. However, for the purposes of this analysis, the benefits of MM 21-8 are assumed to be captured within the 2019 Title 24 Standards. MMs 21-6 and 21-7 support the implementation and management of MM 21-8, but were not directly quantified.
- Second, as previously discussed, the electrical demand required for the Project's EV charging infrastructure (66,516 MWh/yr) would result in increased GHG emissions of 11,224 $MTCO_2e$/yr.
- Lastly, other factors include reductions not covered by 2019 Title 24 Standards that are attributable to the quantifiable portions of MM 21-1 related to 50 percent on-site renewables, and MMs 13-2 and 13-6 related to high-efficiency lighting, which result in reduced GHG emissions of -2,195 $MTCO_2e$/yr.

[13] See, e.g., U.S. Department of Energy, Benefits and Considerations of Electricity as a Vehicle Fuel, https://www.afdc.energy.gov/fuels/electricity_benefits.html, last accessed June 2018.

In summary, the total projected electrical demand for the Updated GHG Calculations includes the reductions associated with 2019 Title 24 Standards (-3,173 $MTCO_2e$), MM reductions (-2,195 $MTCO_2e$), and EV charging demands (11,224 $MTCO_2e$), resulting in a total increase of 5,856 $MTCO_2e$ for the Updated GHG Electrical Calculations when compared to the DEIR Quantified GHG Electrical Emissions. Therefore, the total anticipated electrical emissions for the Updated GHG Calculations is 29,132 $MTCO_2e$/yr, as shown in Table 2.

TABLE 2
ELECTRICITY AND NATURAL GAS DEMAND AND GHG EMISSIONS

	Energy Use		GHG Emissions ($MTCO_2e$/yr)		
	Electricity (MWh/yr)	**Natural Gas (MBTU/yr)**	**Electricity Use**	**Natural Gas Use**	**Total**
DEIR Quantified GHG Emissions	137,007	486,870	23,276	26,137	**49,413**
Updated GHG Calculations	173,360	482,765	29,132	25,915	**55,047**
Difference			**5,856**	**-222**	**5,634**

$MTCO_2e$/yr: Metric tons of carbon dioxide equivalent per year; MWh/yr: megawatt hours per year; MBTU/yr: million British thermal units per year

Sources: DEIR Quantified GHG Emissions from Table 5.21-6 in DEIR Section 5.21; Updated GHG Calculations from Psomas using CalEEMod version 16.3.2 (June 2018)
Note: Total emissions may not add up exactly due to rounding.

As shown in Tables 1 and 2, the -222 MTCO2e/year reduction in GHG emissions for natural gas between the DEIR Quantified GHG Emissions and the Updated GHG Calculations is due to inclusion of the energy use reductions associated with the 2019 Title 24 Standards. Because the allocation of energy reductions associated with the 2019 Title 24 Standards between electricity and natural gas is currently unknown and the majority of the reductions is expected to occur in the electricity sector, the projected reductions in energy use will occur in electricity, and natural gas was calibrated to the comparable level of emissions as reported within the DEIR.

In summary, due to the combination of quantified EV charging demand, which increases Project electricity use, and reductions in electricity use associated with the new 2019 Title 24 Standards, which decreases Project electricity use, the Updated GHG Calculations include an overall increase GHG emissions from the use of electrical power when compared to the DEIR Quantified GHG Emissions.

2.3 WATER AND WASTEWATER EMISSIONS

The water and wastewater emissions estimates in the Updated GHG Calculations reflect: (1) updated water supply and conveyance energy requirements for Project local water supplies; (2) CalEEMod wastewater treatment default adjustments to exclude treatment technologies that will not be used by the Project; and (3) the Project's recapture and use of biogas to generate power from the wastewater treatment process.

The CalEEMod defaults for water-related energy demand are based on CEC estimates of water supply and conveyance energy use to import water to southern California, or 9,727 kilowatt hours per million gallons (kWh/mg).[14] The CEC estimates are sensitive to geographic considerations. The CEC's estimated water supply and conveyance energy use for northern California locations, which are more proximate to major sources of state water supplies such as the Sacramento Delta, is just 2,117 kWh/mg, much lower than the CalEEMod default based on southern California. As

[14] Navigant Consulting, Inc. Refining Estimates Of Water- Related Energy Use In California, California Energy Commission Public Interest Energy Research Program, CEC-500-2006-118, December 2006, available at http://www.energy.ca.gov/2006publications/CEC-500-2006-118/CEC-500-2006-118.PDF, accessed May 2018.

shown in DEIR Table 5.18-10, on average approximately 37 percent of the Project's total water supply (4,290 acre-feet per year) will be imported and approximately 67 percent of the total supply (7,245 acre-feet per year) will be obtained from local, geographically proximate sources, including: (1) groundwater and imported water return flows in accordance with the Antelope Valley groundwater adjudication, (2) water stored in onsite and adjacent Project water banking facilities, and (3) recycled water collected, treated, and distributed onsite. The Updated GHG Calculations uses the default CalEEMod water supply and conveyance energy demand rate (9,727 kWh/mg) for Project water supply imports, and uses the CEC northern California water supply and conveyance energy demand rate (2,117 kWh/mg) for the Project's local supplies.

This analysis is conservative because the Project's local supplies are either located onsite or in adjacent locations. In contrast, the CEC northern California water supply and conveyance energy use factor includes imports to the Bay Area from Hetch Hetchy reservoir in Yosemite National Park, east of the Sacramento Delta though the Mokelumne Aqueduct and other relatively lengthy conveyance facilities.

The CalEEMod defaults for wastewater treatment include the use of facultative lagoon and septic tank technologies. Neither of these technologies will be used by the Project. The CalEEMod defaults also assume that biogas generated by wastewater treatment process will be combusted for disposal rather than used to generate energy for other purposes. The Project will utilize treatment process biogas to produce energy. The use of the northern California water supply and conveyance energy factor for Project local water supplies and CalEEMod input adjustments for wastewater technology and biogas reuse collectively reduce water and wastewater GHG emissions by -3,184 $MTCO_2e$/yr from the DEIR Quantified GHG Emissions. MM 18-1 and MMs 21-9 through 21-13 were used to quantify the water and wastewater reductions in the Updated GHG Calculations. MM 18-2 and MMs 19-1 through 19-5 support the implementation and management of these quantified MMs, but were not directly quantified.

2.4 SOLID WASTE EMISSIONS

MM 17-10 in the revised MMRP (see Final EIR Appendix 2.0-C.Rev) requires that at least 75 percent of Project operational waste be diverted from landfill disposal, which is consistent with the implementation of the AB 341 goals for statewide recycling. CalEEMod calculates GHG emissions based on the volume of waste subject to landfill decomposition. The 75 percent waste diversion requirement in MM 17-10 reduces solid waste GHG emissions by -5,107 $MTCO_2e$/yr from the DEIR Quantified GHG Emissions.

2.5 OTHER EMISSIONS

MM 7-11 and MM 7-12, which require restoration of impacted woodlands and jurisdictional drainages pursuant to County and regulatory agency permit requirements, as well as MM 21-20 related to County landscaping requirements, contribute to vegetation quantification reductions for the Updated GHG Calculations. MMs 4-4, 7-1, 7-13, and 7-19 support the implementation and management of these quantified MM, but were not directly quantified. For construction sources GHG emissions, MM 11-2 contributes to emission reductions for air quality purposes, but does not directly contribute to GHG emissions reductions. Project related construction emissions were conservatively assumed to be diesel/gasoline and do not include any GHG emission reductions for electrically powered construction equipment. For area sources GHG emissions, MM 11-3 related to fireplace restrictions and reductions associated with the electrification of landscaping equipment supports GHG reductions of -74 $MTCO_2e$/yr.

In summary, Project GHG emissions in the Updated GHG Calculations are 157,642 $MTCO_2e$/yr, which are -86,736 $MTCO_2e$/yr (35 percent) lower than the DEIR Quantified GHG Emissions of 244,379 $MTCO_2e$/yr.

2.6 METHANE EMISSIONS

The grasslands on Tejon Ranch, including portions of the Project site, have been grazed by cattle for approximately 150 years continuously. The grazing management regime on Tejon Ranch has been season-long “continuous” grazing, and the intensity and duration of grazing, including areas within the Project’s Mitigation Preserve, have fluctuated from year to year and month to month dependent on availability of forage. Forage availability is closely correlated with weather conditions, particularly precipitation quantity and timing, which also fluctuates according to periods of drought. As such, cattle grazing is considered to be a baseline environmental condition on the Project site and within Tejon Ranch as a whole.

Cattle grazing results in cow belches/flatulence, which produce methane emissions. Methane has a substantially higher global warming potential than carbon dioxide. Upon Project implementation, cattle grazing will be eliminated within the majority of the grassland areas of the Project site. However, as a requirement of Project implementation (see MM 7-10 and MM 7-23), the Project Applicant must prepare a Native Perennial Grassland and Wildflower Field Mitigation Plan that preserves grasslands, and also allows cattle grazing to continue to protect resource (grassland) values. This continued grazing will occur on portions of the Project site and within the Mitigation Preserve, as appropriate.

Because all of the lands within the Mitigation Preserve are currently grazed, the continuation of grazing, (as directed by results of long term biological monitoring per the Native Perennial Grassland and Wildflower Field Mitigation Plan), is expected to be approximately the same as in the existing condition. Existing grassland conditions have occurred in conjunction with the current grazing regime. To avoid potential disruption of existing conditions, the current grazing regime is expected to continue under the Native Perennial Grassland and Wildflower Field Mitigation Plan. However, cattle grazing will be eliminated within the majority of the grassland areas of the Project site due to development, resulting in an anticipated net reduction of cattle across Tejon Ranch as a whole. The reduction in the level of grazing is strictly due to the removal of grazing lands within the Project development areas. As such, the level of grazing, both intensity and duration, is expected to decrease as a result of the Project, and any methane emissions from cattle grazing would be similarly reduced in the future buildout condition.

The amount of reduction in GHG emissions has not been quantified due to the historic fluctuations of cattle grazing across Tejon Ranch coupled with the uncertain amount of cattle required to maintain the Tejon Ranch grasslands in the future. As such, the GHG analysis conservatively assumes no change from the baseline condition related to methane emissions from cattle grazing, even though reductions in cattle grazing are expected to occur at Project buildout.

3.0 UPDATED GHG CALCULATIONS EMISSIONS SUBJECT TO CAP AND TRADE

California has enacted the only state program in the United States for capping GHG emissions and requiring the purchase of emission allowances for covered activities. The state extended the duration of the Cap and Trade program from 2020 to 2030 in July 2017 (AB 398). The current Cap and Trade program was imposed as a tax by a two-thirds vote of the Legislature in 2017, following issuance of the DEIR. AB 398 includes numerous requirements for administering the Cap and Trade program, and disbursing funds collected from that program. Prior to AB 398, California had imposed a cap and trade program pursuant to other statutory authorities, one of which required that the Cap and Trade program be phased out by 2020. There was a legal disagreement as to whether additional statutory authority was needed to extend the Cap and Trade program beyond 2020. CARB, the state's expert air quality regulatory agency, and the California Attorney General representing CARB in the litigation, concluded that CARB did have the authority to continue to implement the Cap and Trade program under its general air quality and climate statutory authorities even if no new legislation was enacted:

> In AB 32 the Legislature declared that "[g]lobal warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California." To address this threat the Legislature established an initial target to reduce the state's greenhouse gas emissions to 1990 levels by 2020 and called for the state to maintain and continue reductions in emissions beyond 2020. AB 32 charges ARB with "monitoring and regulating sources of emissions of greenhouse gases that cause global warming in order to reduce the emissions of greenhouse gases." To guide ARB in its new role the Legislature established a series of milestones for ARB to meet in developing a regulatory program requiring ARB to: establish mandatory reporting and verification of greenhouse gas emissions, prepare and approve a scoping plan, and adopt greenhouse gas emission reduction measures into regulation. Regarding this last responsibility--the adoption of regulations--the Legislature did not require the adoption of specific emission reduction measures nor did it attempt to design such measures... While the Legislature did not mandate specific emission reduction measures it expressly allowed ARB to adopt market-based compliance mechanisms such as cap and trade.[15]

In December 2017 CARB adopted a new Scoping Plan, setting forth measures to reduce GHG emissions to achieve state GHG emission reduction targets for 2030 as prescribed by statute, and by 2050 as set forth in Executive Orders issued by the California governor's office.[16] The Cap and Trade program is included in the Scoping Plan, without a termination date of 2030. Based on CARB's expert opinion that specific statutory authorization for a Cap and Trade program is not required, the inclusion of a Cap and Trade program through 2050 in the CARB 2017 Scoping

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[15] Respondents Brief of California Air Resources Board et al., *California Chamber of Commerce et al. v. California Air Resources Board et al.*, Case No. C075930, California Court of Appeals, Third Appellate District, filed by the California Attorney General on February 15, 2015, pages 3 and 4, citations and paragraph formatting omitted. References to "ARB" in the Respondent's Brief are to CARB.

[16] California Air Resources Control Board, California's 2017 Climate Change Scoping Plan (November 2017), accessed at https://www.arb.ca.gov/cc/scopingplan/scopingplan.htm June 2018). See, e.g., page 99 (CARB 2030 and 2050 per-capita "local plan-level" GHG reduction goals); page 18 (discussion of 2050 "path" to state emissions that are 80% below 1990 levels); and Table 1: Scoping Plan Scenario on page 25, which refers to the "Post-2020 Cap-and-Trade Program" and does not identify an implementation time frame for the program in the last column. Implementation time frames are identified for all other Scoping Plan policies in Table 1, and the reference in Table 1 to a "Post-2020 Cap-and-Trade Program" without a fixed termination date is used throughout the Scoping Plan.

Plan, and other relevant climate laws, regulations, and policies, there is substantial evidence of the Cap and Trade program's continued existence beyond 2030.

As shown in Table 3, the Updated GHG Calculations emissions are 157,642 $MTCO_2e$/yr. Table 3 identifies the Updated GHG Calculations emissions that are subject to the state Cap and Trade program.

TABLE 3
UPDATED GHG CALCULATIONS EMISSIONS SUBJECT TO CAP-AND-TRADE
(MTCO2E/YEAR)

GHG Emission Sources	Updated GHG Calculations	Subject to Cap and Trade?	Amount Subject to Cap-and-Trade	Remaining Emissions After Cap-and-Trade Offsets
Area	11,223	Yes: natural gas for fireplaces and electricity for landscaping equipment	-11,223	0
Energy				
Electrical Power	29,132	Yes: emissions from generating electrical power	-29,132	0
Natural Gas	25,915	Yes: Natural gas used for building heating, cooking, etc.	-25,915	0
Mobile	77,007	Yes: transportation fuels	-77,007	0
Solid Waste	5,107	No: landfill decomposition emissions	0	5,107
Water and Wastewater				
Wastewater Electricity	277	Yes: emissions from generating electrical power	-277	0
Water Electricity	2,764	Yes: emissions from generating electrical power	-2,764	0
Bio-Gas	1,162	No: biogas recovered from treatment process	0	1,162
Construction	4,490	Yes: transportation fuels	-4,490	0
Vegetation				
Vegetation Loss	814	No	0	814
New Trees	-249	No	0	-249
Total	**157,642**		**-150,808**	**6,834**
Source: Updated GHG Calculations from Psomas using CalEEMod version 16.3.2 (June 2018)				

Table 3 shows that approximately 96 percent, or 150,808 $MTCO_2e$/yr of the total Updated GHG Calculations emissions are covered by the Cap and Trade program. Only approximately 4 percent of the total emissions, or 6,834 $MTCO_2e$/yr, largely from landfill waste and wastewater treatment process biogas reuse for energy production, would not be subject to the purchase of emission allowances under the Cap and Trade program.

4.0 NET ZERO CARBON FROM THE ELECTRIC SECTOR

"Net zero carbon from the electric sector" means that carbon emissions created to produce electricity that is consumed within the Specific Plan area will be offset with an equivalent amount of carbon emission reductions that result from quantified GHG reductions.

As discussed above, due to the quantification of EV charging electrical use, Project electricity increases in the Updated GHG Calculations. GHG emissions from electrical use are 5,856 $MTCO_2e$/yr higher than the DEIR Quantified GHG Emissions. Table 4 shows that the Project's total GHG emissions from electrical energy use for all sources are 32,173 $MTCO_2e$/yr.

TABLE 4
ADDITIONAL REDUCTION ANALYSIS ELECTRICAL POWER EMISSIONS AND NET EMISSIONS REDUCTIONS FROM DEIR

GHG Emission Sources	Electrical Power GHG Emissions ($MTCO_2e$/yr)
Area	0
Energy	29,132
Electrical Power	*29,132*
Natural Gas	*0*
Mobile	0
Solid Waste	0
Water and Wastewater	
Water (Supply, Treatment, Distribution)	2,764
Wastewater Electricity	277
Construction	0
Vegetation	0
Total Electrical Power GHG Emissions	**32,173**
Updated GHG Calculations Electrical Power and Total GHG Emissions Summary	
Total Electrical Power GHG Emissions	**32,173**
Total Reduction from DEIR Quantified GHG Emissions (Mitigation Measures Only- See Table 1)	**-34,412**
GHG Emission Reductions Net of Electrical Power Emissions	**-2,239**
Sources: DEIR Quantified GHG Emissions from DEIR Section 5.21; Updated GHG Calculations from Psomas using CalEEMod version 16.3.2 (June 2018).	

Table 4 also compares the total reduction from the DEIR Quantified GHG Emissions with the total electrical power emissions in the Updated GHG Calculations. Total Project emissions are -86,736 $MTCO_2e$/yr lower in the Updated GHG Calculations than the DEIR Quantified GHG Emissions. The total level of emission reductions is nearly three times larger than the total GHG emissions from electrical power consumption in the Updated GHG Calculations. Even without consideration of GHG emissions reductions associated with regulations (see Table 1), the Project's MMs reduce GHG emissions by -34,412 $MTCO_2e$/yr, which is greater than the emissions associated with Project's electricity usage at Specific Plan buildout. Consequently, Table 4 demonstrates that, net of GHG emissions attributable to electrical power use, the Updated GHG Calculations reduces emissions by -2,239 $MTCO_2e$/yr from the DEIR Quantified GHG Emissions counting only reductions attributable to Project mitigation requirements. Therefore, the Updated GHG Calculations shows that the Project achieves net-zero electricity emissions. As shown in Table 1, the Updated GHG Calculations reduce total GHG emissions attributable to regulatory, CalEEMod as well as Project mitigation requirements by -86,736 $MTCO_2e$/yr from the DEIR Quantified GHG

Emissions, about 2.7 times the amount of emissions from electrical power use at Specific Plan buildout.

5.0 SERVICE POPULATION

Table 5.21-10 of the DEIR Section 5.21, Climate Change, included a GHG Project Efficiency of 3.02 $MTCO_2e$ per Service Population (SP) per year ($MTCO_2e$/SP/yr) based on an SP of 80,825 and GHG emissions of 244,379 $MTCO_2e$/yr. The Updated GHG Calculations summarized in Table 5 below show a GHG Efficiency of 1.93 $MTCO_2e$/SP/year based on an SP of 81,848 and GHG emissions of 157,642 $MTCO_2e$/yr. The Updated GHG Calculations consider residents, non-resident employees, and non-resident/non-employee visitors to the Project site. The California Air Resources Board (CARB) adopted the 2017 Climate Change Scoping Plan, which recommends statewide targets of no more than 6 $MTCO_2e$ per capita by 2030, and no more than 2 $MTCO_2e$ per capita by 2050. The GHG Efficiency of the Updated GHG Calculation, 1.93 $MTCO_2e$/SP/year, is below the statewide Scoping Plan recommended targets for 2030 and 2050.

TABLE 5
UPDATED GHG CALCULATIONS
SERVICE POPULATION GHG EFFICIENCY

	Factors
Residents at Buildout	57,150
Non-Resident Employees	15,783
Non-Resident/Non-Employee Visitors	8,915
Service Population (SP)	**81,848**
Project GHG Emissions ($MTCO_2e$/yr)	**157,642**
GHG Efficiency ($MTCO_2e$/SP/yr)	**1.93**
Sources: DEIR Section 5.9, Population and Housing and Stantec.	

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ATTACHMENT A

GHG REDUCING MITIGATION MEASURES IN CENTENNIAL PROJECT ENVIRONMENTAL IMPACT REPORT PROJECT NO. 02-232 (Revised Mitigation Measures Showing Underlined/Strikeout Text, August 13, 2018)

#	Environmental Factor	Mitigation	Action Required	When Monitoring to Occur	Responsible Agency or Party	Monitoring Agency or Party	Quantified/ Support[1]
5.10	**Traffic, Access and Circulation**	**MM 10-1** The Project shall provide internet infrastructure and a community intranet with access for homeowners associations; interest groups; local event scheduling; schools, library, carpool and transit services; and other on-site entertainment and amenities for residential land uses. The internet and intranet will reduce the need for people to use automobile travel to obtain the information that is provided by both. The intranet shall also provide education about greenhouse gas (GHG) emissions; GHG reduction opportunities; energy and water conservation opportunities; financial incentives (e.g., rebates and low-interest loans) for energy-efficiency improvements; and energy-efficiency technology systems, including those suitable for large commercial and industrial users.	Provide internet infrastructure and a community intranet	Prior to issuance of applicable construction permits	Project Applicant/ Developer	County Department of Regional Planning	**Quantified**
5.10	**Traffic, Access and Circulation**	**MM 10-25** *(Traffic Study MM-24)* The Project Applicant/Developer shall implement the Mobility Plan, included as Section 3.2 of the Specific Plan, which provides an extensive system of sidewalks, greenway trails, community trails, a dedicated transit easement, and two transit hubs to serve as alternative means of transportation on the Project site. The Mobility Plan also requires creation and ongoing operation of a Transportation Management Association (TMA) to implement ongoing transportation improvements and	Verification of compliance with Specific Plan requirements for the Mobility Plan on the Tentative Maps	Prior to approval of Tentative Maps	Project Applicant/ Developer	County Department of Regional Planning	**Quantified**

[1] In the last column of the Table, "Quantified" means that the mitigation measure (MM) results in a quantifiable reduction in GHG emissions identified in the Updated GHG Calculations based on the California Emissions Estimator Model (CalEEMod) results. MM "Support" means that the MM is not directly quantified, but rather it provides a mechanism for ensuring the implementation of the quantified MM. For example, MM 18-1 requires the implementation of the water-reducing Project features, including the use of recycled water, water efficient appliances and irrigation, indoor/outdoor water use standards, and requires a water budget-based rate system, which resulted in quantifiable reductions in GHG emissions. In support of MM 18-1, the implementation of water use efficiencies must be monitored and confirmed through compliance with MM 18-2. Therefore, MM 18-2 supports the implementation and management of MM 18-1 but is not directly responsible for a quantified GHG emissions reduction.

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		programs. The Project Applicant/Developer, through the required implementation of the Mobility Plan, shall: • Reinforce and serve the Land Use Plan; • Provide future residents, visitors and employees with multiple modes of transit/non-single occupancy vehicle (non-SOV) accessibility for internal and external trips; • Provide options to reduce vehicle trips and emissions by linking effective travel demand management with transportation systems and parking policies; • Provide residents and employees on the Project site with multiple modes of transportation options (i.e., walk, bike, public transit, private auto, car share, bike share, etc.); • Provide for 80 percent on average, but no less than 50 percent of each Village's residential units to be located within one-half mile of a Village Center that includes retail and service uses; • Provide parks within a 5-minute walk (0.25 mile) of 80 percent of all residential units; • Provide a transit route easement no less than 25 feet wide in the Centennial Commerce District connecting the Town Center, Business Park, and Industrial/Civic areas and also northerly connecting to the Village Five Core; • Require TMA implementation of a combination of transit and transportation					

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#	Environmental Factor	Mitigation	Action Required	When Monitoring to Occur	Responsible Agency or Party	Monitoring Agency or Party	Quantified/ Support[1]
		measures to ensure that a minimum of 30 percent of total daily internal on-site trips are completed by using transit modes other than SOV use, including on-demand pooled car or multi-passenger vehicle service; • Require TMA implementation of a combination of transit and transportation measures to ensure that a minimum of 20 percent of total off-site peak hour commutes to and from the Project site are completed by using transit modes other than SOVs, which shall include requiring the TMA to provide am and pm peak hour demand-based multi-passenger transit services for Project residents and employees that link the Project to the nearest Metrolink station and commuter transit hub to the south (currently Santa Clarita) and the east (currently Palmdale), and to the north (Tejon Mountain Village, Tejon Commerce Center, and Grapevine), and to other commuter destinations as warranted by consumer demand; • Require TMA implementation of a program to coordinate with automotive dealers on the Project site to promote ~~CNG,~~ battery electric or hydrogen fuel cell (collectively "electric") ~~, and hybrid electric~~ vehicles; at minimum, this program shall include preferences for dealers offering bulk discounts or other financial incentives; • Require TMA oversight of requirement for service fleet vehicles for agencies or businesses located on-site to be electric ~~alternative fuel~~ vehicles to the maximum extent feasible, as determined by the Project Applicant/Developer in consultation with the					

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#	Environmental Factor	Mitigation	Action Required	When Monitoring to Occur	Responsible Agency or Party	Monitoring Agency or Party	Quantified/ Support[1]
		<u>County, or other future vehicle technologies as may be developed and comply with California's air quality, greenhouse gas, and climate change mandates, and which meet the performance and affordability needs of Project employees and residents as determined by the Project Applicant/Developer in consultation with the County (collectively, "Future Vehicle Fleet" or "FVF")</u>; and • Require TMA implementation of a combination of measures to provide adequate temporary bike <u>or personal electric vehicle (e.g., scooter)</u> parking during large public events conducted at civic center, large amphitheaters, fairgrounds or athletic stadium uses that may be permitted, temporarily permitted, or conditionally permitted on the Project site pursuant to the Specific Plan. Such measures may include, but are not limited to, providing valet bike parking, temporarily anchored bike parking racks, or a secured temporary bike parking enclosure. The Circulation Plan sets forth requirements for roadway classifications; intersection controls; and traffic calming measures. Where approved by the California Department of Transportation (Caltrans) and the County and where maintenance and durability costs are comparable to traditional materials, use "cool" pavement materials, which reduce heat island effect.					

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#	Environmental Factor	Mitigation	Action Required	When Monitoring to Occur	Responsible Agency or Party	Monitoring Agency or Party	Quantified/ Support[1]
5.10	**Traffic, Access and Circulation**	**MM 10-26** *(Traffic Study MM-24)* Each component of the Mobility Plan incorporates Transportation Demand Management (TDM) features to reduce dependence on the automobile, provide for a more efficient use of transportation resources among Project occupants, and thereby reduce pollutant emissions. Related to this is the creation and ongoing operation of a Transportation Management Association (TMA) to fund and manage the operation of ongoing transportation programs, including but not limited to transit and on-demand services. The key TDM elements that are inherent in the overall Mobility Plan are: • Sidewalks, greenway trails, and community trails that link residential, schools, shopping, and employment areas; • Small- to medium-sized streets and blocks that allow for shorter walking distances to retail, parks, schools, and other destinations; • Pedestrian environments incorporated with public streets; • Transit route easement connecting the residential and commerce areas; • Parking behind buildings to encourage walking in retail areas along street frontage; and • Parks within 0.25 mile of 80 percent of all residential units.	Verification of compliance with Specific Plan requirements for Transportation Demand Management on the Tentative Maps	Prior to approval of Tentative Maps	Project Applicant/ Developer	County Department of Regional Planning	**Quantified**

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#	Environmental Factor	Mitigation	Action Required	When Monitoring to Occur	Responsible Agency or Party	Monitoring Agency or Party	Quantified/ Support[1]
5.11	**Air Resources**	**MM 11-1** The Project's plans and specifications shall require stationary sources to comply with the parameters stated in Stationary Source Types, Size Limits, and Quantity Estimates, which is included as Attachment A to the Project's Mitigation Monitoring and Reporting Program. Should there be a need for a stationary source exceeding the prescribed limits, the Project Applicant/Developer shall apply for source-specific permit from the Antelope Valley Air Quality Management District (AVAQMD) or South Coast Air Quality Management District (SCAQMD), as applicable.	Require stationary sources to comply with the parameters stated in Attachment A	Prior to issuance of applicable construction permits	Project Applicant/ Developer and AVAQMD and SCAQMD	County Department of Regional Planning	
5.11	**Air Resources**	**MM 11-2** The Project's plans and specifications shall include the following measures to minimize nitrogen oxide (NOx) and volatile organic compound (VOC) emissions during construction: • All off-road diesel-powered construction equipment greater than 50 horsepower shall meet U.S. Environmental Protection Agency (USEPA) Tier 4 Final emission standards to the extent that the equipment is available. In addition, all construction equipment shall be outfitted with Best Available Control Technology (BACT) devices certified by the California Air Resources Board (CARB) or the U.S. Environmental Protection Agency (USEPA). Any emissions-control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations. If Tier 4 Final equipment is not available, the Project Applicant/Developer shall provide the County with documentation showing the reasons for non-availability.	Require measures to minimize NOx and VOC emissions	Prior to issuance of applicable construction permits and During grading activities	Project Applicant/ Developer	County Department of Regional Planning	**Quantified**

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		• Alternatively, construction equipment may be selected according to the Green Construction Policy used by the Los Angeles County Metropolitan Transportation Authority or the ports of Los Angeles/Long Beach. These policies include provisions to 'step down' from Tier 4 equipment to Tier 3 or Tier 2 if specified criteria are met. In addition, all construction equipment shall be outfitted with Best Available Control Technology (BACT) devices certified by the California Air Resources Board (CARB) or the U.S. Environmental Protection Agency (USEPA). • Require the use of 2010 and newer diesel haul trucks (e.g., material delivery trucks and soil import/export). If the Project Applicant/Developer determines that 2010 model year or newer diesel trucks cannot be obtained, trucks that meet USEPA 2007 model year NOx emissions requirements shall be required. If 2010 model year or newer diesel trucks are not available, the Project Applicant/Developer shall provide the County with documentation showing the reasons for non-availability. • A copy of each unit's certified tier specification, BACT documentation, and CARB or District operating permit shall be provided to the County at the first occurrence of mobilization of each applicable unit of equipment.					

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#	Environmental Factor	Mitigation	Action Required	When Monitoring to Occur	Responsible Agency or Party	Monitoring Agency or Party	Quantified/ Support[1]
		• Construction contractors shall ensure construction equipment is properly serviced and maintained to the manufacturer's standards. • Construction contractors shall limit non-essential idling of construction equipment to no more than five consecutive minutes. • Construction contractors shall use Super-Compliant Architectural/Industrial (AIM) Coatings to the extent that they are commercially available and certified to meet the applicable requirements of Antelope Valley Air Quality Management District Rule 1113 and South Coast Air Quality Management District Rule 1113.					
5.11	**Air Resources**	**MM 11-3** The Project's plans and specifications shall prohibit wood-burning fireplaces as required by SCAQMD Rule 445 in single-family residences throughout the entire Project site, including at residences that are 3,000 or more feet above mean sea level at which the SCAQMD prohibition would otherwise not apply. Natural gas fireplaces shall be limited to a total of 13,954.	Prohibit wood burning fireplaces and Limit total fireplaces to 13,954	Prior to issuance of applicable construction permits	Project Applicant/ Developer	County Department of Regional Planning	**Quantified**

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#	Environmental Factor	Mitigation	Action Required	When Monitoring to Occur	Responsible Agency or Party	Monitoring Agency or Party	Quantified/ Support[1]
5.11	**Air Resources**	**MM 11-4** The Project's plans and specifications for non-residential buildings shall demonstrate that the following features have been incorporated into the building designs. Proof of compliance shall be provided to the County prior to the issuance of occupancy permits. • For buildings with over 10 tenant-occupants, changing/shower facilities shall be provided as specified in Section A5.106.4.3, Nonresidential Voluntary Measures, of the CALGreen Code as follows: for 11 to 50 tenant-occupants, one unisex shower and two 2-tier lockers; for 51 to 100 tenant-occupants, one unisex shower and three 2-tier lockers; for 101 to 200 tenant-occupants, one shower per gender and four 2-tier lockers; and for over 200 tenant-occupants, one shower per gender for each 200 additional tenant-occupants and one 2-tier locker for each 50 additional tenant-occupant. • Preferential parking for <u>electric vehicles, other FVF vehicles,</u> ~~low-emitting, fuel-efficient,~~ and carpool/van vehicles shall be provided as specified in Section A5.106.5.1, Nonresidential Voluntary Measures, of the CALGreen Code as follows: two for 10 to 25 spaces; four for 26 to 50 spaces; six for 51 to 75 spaces; nine for 76 to 100 spaces; eleven for 101 to 150 spaces; 18 for 151 to 200 spaces; and at least 10 percent of total for 201 and more spaces. • Electric Vehicle Charging Spaces (EV Space), as defined by CALGreen Code Section 202, shall be installed to support future installation of Electric Vehicle Supply Equipment (EVSE), as defined by CALGreen Code Section 202, at each non-residential building with 10 or more	Demonstrate that plans and specifications include features have been incorporated into the building designs	Prior to issuance of applicable building permits	Project Applicant/ Developer	County Department of Regional Planning	**Quantified**

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#	Environmental Factor	Mitigation	Action Required	When Monitoring to Occur	Responsible Agency or Party	Monitoring Agency or Party	Quantified/ Support[1]
		parking spaces. Installation of each EV Space shall be consistent with Sections A5.106.5.3 and A5.106.5.3.1, Nonresidential Voluntary Measures (Tier 1), of the CALGreen Code. The EV Space facilities shall meet Section 406.9 (Electric Vehicle) of the *California Building Code* and as follows:					

Total Number of Actual Parking Spaces	Tier 1 Number of Required EV Spaces
0-9	0
10-25	2
26-50	3
51-75	5
76-100	7
101-150	10
151-200	14
>200	8 percent of total spaces rounded up to nearest whole number

Multiple charging spaces required. When multiple EV Spaces are required, plans shall include the location(s) and type of EVSE, raceway method(s), wiring schematics and electrical calculations to verify that the electrical system has sufficient capacity to charge simultaneously all the electric vehicles (EV) at all designated EV Spaces at their full rated amperage. Plan design shall be based on Level 2 EVSE at its maximum operating ampacity. Provide raceways from the electrical service panel to the designated parking areas which are required to be installed at the time of construction.

Increased EVSE Installations. Changes to EVSE parking shall be allowed to the extent allowed under state laws, and the duration of vehicular occupancy of EV spaces may be

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#	Environmental Factor	Mitigation	Action Required	When Monitoring to Occur	Responsible Agency or Party	Monitoring Agency or Party	Quantified/ Support[1]
		restricted as authorized by state law to allow charging of multiple vehicles each day. Demand for EV Space facilities shall be monitored biennially by the TMA, additional EV parking spaces shall be made available at lots where demand exceeds supply. The TMA biennial survey shall also consider future transportation technology and practices, including for example changes in vehicular electric charging technology, other FVF changes, or other transportation practices and services changes (e.g., with lower-automobile ownership rates leading to reduced parking demand and/or reduced private ownership of vehicles requiring daily electric charging).					
5.11	**Air Resources**	**MM 11-5** The Project's plans and specifications for residential buildings shall demonstrate that the following features have been incorporated. • Visitor parking shall include preferentially located parking spaces for electric ~~alternative-fueled~~ vehicles. • Exterior electrical receptacles and natural gas or propane hookups. • Bicycle parking shall be provided as specified in Section A4.106.9, Residential Voluntary Measures, of the CALGreen Code or as required by Section 22.52.1225B of the County Code, whichever is more stringent. The requirements under the Residential Voluntary Measures of the CALGreen Code are as follows: **Short-term bicycle parking.** Provide permanently anchored bicycle racks within 100 feet of the visitor's entrance, readily visible to passers-by, for five percent of	Demonstrate that plans and specifications include visitor parking and bicycle parking features in the building designs	Prior to issuance of applicable building permits	Project Applicant/ Developer	County Department of Regional Planning	**Support**

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#	Environmental Factor	Mitigation	Action Required	When Monitoring to Occur	Responsible Agency or Party	Monitoring Agency or Party	Quantified/ Support[1]
		visitor motorized vehicle parking capacity within a minimum of one two-bike capacity rack. **Long-term bicycle parking for multifamily buildings.** Provide on-site bicycle parking for at least one bicycle per every two dwelling units. Acceptable parking facilities shall be conveniently reached from the street and may include, but not limited to: 1. Covered, lockable enclosures with permanently anchored racks for bicycles. 2. Lockable bicycle rooms with permanently anchored racks. 3. Lockable, permanently anchored bicycle lockers. **Long-term bicycle parking for hotel and motel buildings.** Provide one on-site bicycle parking space for every 25,000 square feet, but not less than two. Acceptable parking facilities shall be conveniently reached from the street and may include, but not be limited to: 1. Covered, lockable enclosures with permanently anchored racks for bicycles. 2. Lockable bicycle rooms with permanently anchored racks. 3. Lockable, permanently anchored bicycle lockers. **Bicycle parking areas may also be used by small electric vehicles such as scooters.**					

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#	Environmental Factor	Mitigation	Action Required	When Monitoring to Occur	Responsible Agency or Party	Monitoring Agency or Party	Quantified/ Support[1]
5.11	**Air Resources**	**MM 11-6** The Project's plans and specifications for parking structures and parking lots with 20 or more parking spaces that serve uses other than residential or nonresidential buildings (e.g., trailhead, park), and parking structures and parking lots that serve multifamily residential buildings with 17 or more multifamily units, shall demonstrate that the following features have been incorporated into the parking facility. • The parking facility shall include a minimum of five percent preferentially located parking spaces for electric ~~alternative-fueled (electric, natural gas, or similar low-emitting technology)~~ vehicles. • Five percent of the total number of parking spaces provided in the parking facility, but in no case less than one, shall be Electric Vehicle Parking Spaces (EV Spaces), as defined in CALGreen Code Section 202, capable of supporting future Electric Vehicle Supply Equipment (EVSE), as defined in CALGreen Code Section 202. Calculations for the required number of EV Spaces shall be rounded up to the nearest whole number and the design and installation of each EV Space shall be consistent with Section A4.106.8.2, Residential Voluntary Measures, and Section 4.106.4.2, of the CALGreen Code as follows: **Single charging space requirements.** When only a single EV Space is required, install a listed raceway capable of accommodating a dedicated branch circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall be securely fastened at the main service or subpanel and shall terminate in close proximity to the	Demonstrate that plans and specifications include preferential parking and electric vehicle charging features in the building designs	Prior to issuance of applicable building permits	Project Applicant/ Developer	County Department of Regional Planning	**Quantified**

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		proposed location of the charging system into a listed cabinet, box or enclosure. **Multiple charging spaces required.** When multiple EV Spaces are required, plans shall include the location(s) and type of EVSE, raceway method(s), wiring schematics and electrical calculations to verify that the electrical system has sufficient capacity to charge simultaneously all the electric vehicles at all designated EV Spaces at their full rated amperage. Plan design shall be based on Level 2 EVSE at its maximum operating ampacity. Only underground raceways and related underground equipment are required to be installed at the time of construction. • For residential parking facilities, bicycle parking shall be provided as specified in Section A4.106.9, Residential Voluntary Measures, of the CALGreen Code, or as required by County Code Section 22.52.1225B, whichever is more stringent. • Bicycle parking spaces at a rate of 5 percent of minimum required vehicle parking spaces for nonresidential land uses or as required by Section 22.52.1225B of the County Code, whichever is more stringent.					
5.11	**Air Resources**	**MM 11-7** The Project's plans and specifications for business park or water reclamation facility land uses shall demonstrate that buffer areas adjacent to proposed business parks in compliance with the Air Quality Analysis for Stationary Sources Allowed by the Centennial Specific Plan, (see Appendix 5.11-B of this EIR) have been incorporated into the design plans. The buffer areas shall prohibit uses that are potential sources of toxic air contaminants and shall prohibit uses that include sensitive	Demonstrate that the map includes buffer areas that prohibit toxic air contaminant sources and sensitive receptors	Prior to the approval of Final Maps that include a business park or water reclamation facility	Project Applicant/ Developer	County Department of Regional Planning and County Department of Public Health	

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		receptors, except as allowed through written evidence that the sensitive use would not be exposed to Toxic Air Contaminants with pollutant concentrations resulting in a cancer risk greater than or equal to 10 in 1 million for health risks and 1.0 for non-cancer chronic and acute hazard indices (HIs).					
5.13	**Visual Resources**	**MM 13-6** An Exterior Lighting Plan shall be prepared in coordination with a qualified Biologist, be reviewed by an Electrical Engineer who is registered in the State of California, and then approved by the County prior to the submittal of each building permit. The Lighting Plan shall apply to all proposed structures and for development areas that border natural open space resources. The Lighting Plan shall be consistent with County Rural Outdoor Lighting District requirements for the Antelope Valley and shall provide guidelines for the outdoor lighting to be used throughout the Project site. Final lighting orientation and design shall be approved by the County. The Lighting Plan shall include, but not be limited to, the following: a. All lighting within 300 feet of natural open space areas shall only be implemented where needed for safety and shall be directed away from these areas and shielded so that light is not directed into open space and riparian areas. Where possible, these safety lights shall be motion sensor activated with infrared light sensors to prevent daytime lighting. b. Mercury vapor and halide lighting shall not be used on the perimeter of the developed areas or adjacent to designated open space.	Prepare an Exterior Lighting Plan for review and approval	Prior to approval of improvement plans for Final Maps	Project Applicant/ Developer	County Department of Regional Planning	**Quantified**

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		c. Illumination levels should be compatible with the character and use of surrounding development as determined by national lighting organizations. The Illuminating Engineering Society of North America publishes recommendations for the lighting industry that include illumination levels for outdoor lighting. d. Low-pressure sodium lighting fixtures or flashing lights shall not be used except in emergency situations. e. Exterior lighting standards and fixtures shall be located and designed to minimize direct glare beyond the site boundaries. Lighting shall be fully shielded and directed downwards to confine light spread solely within necessary locations. Illumination or glare from the exterior lighting system onto adjacent properties or streets should be minimized. f. Security lighting fixtures shall not project above the roof line of the building on which they are mounted. g. Where applicable, time-control devices shall be utilized on exterior lighting sources. h. Street, parking lot, and structural lighting fixtures shall provide adequate illumination for safety and comfort of vehicular and pedestrian traffic while minimizing light spillover.					

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5.14	**Parks and Recreation**	**MM 14-1** The Project shall implement the following components of the Green Development Program to provide healthy outdoor parks and recreational resources on the Project site: • Provide a functional system of community trails, greenway trails, and natural corridors to serve as recreational opportunities and as alternative means of transportation to reduce vehicular traffic. • Provide "complete streets" throughout the community to provide alternative modes of transport (walking, biking, low-speed vehicles (LSVs) such as neighborhood electric scooters, bikes and other low-speed electric vehicles (NEVs). • Incorporate sidewalks (separated by a parkway from streets) and trees to be the main street elements to create a walking environment, promoting pedestrian activity. • Provide Class I – IV bike lanes throughout the Project to ensure a variety of alternative transportation options. • Provide permanently anchored bicycle racks within 200 feet of visitors' entrance of nonresidential buildings, readily visible to passers-by, for 5 percent of new visitor motorized vehicle parking spaces being added, with a minimum of two-bike capacity rack. • For new nonresidential buildings with over 10 tenant-occupants or for additions or alterations that add 10 or more tenant vehicular parking spaces, provide secure bicycle parking spaces at a rate of 5 percent of tenant parking being added, with a minimum	Implement the components of the Green Development Program	Prior to approval of Tentative Maps	Project Applicant/ Developer	County Department of Regional Planning and County Department of Parks and Recreation	**Quantified**

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		of one space. • For residential buildings, provide permanently anchored bicycle racks within 100 feet of the visitor's entrance, readily visible to passers-by, for 5 percent of visitor motorized vehicle parking capacity with a minimum of one two-bike capacity rack. • Nonresidential buildings within the Business Park and Commercial areas with 75,000 or more square feet of gross floor area shall provide locker rooms and shower facilities. • For multifamily buildings, provide on-site bicycle parking for at least one bicycle per every two dwelling units • Include planned green space, which are integrated pockets of open space (including greenways, tree stands, hillsides, and community parks) with minimal developed amenities. Planned green space reduces evapotranspiration; allows natural percolation of runoff from adjacent lands; reduces the heat island effect; and adds aesthetic value to a site. Planned green space can provide habitat as well as linkages to other habitat areas.					

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5.17	**Other Public Services**	**MM 17-9** The Project Applicant/Developer shall be responsible for implementing the following construction waste reduction requirements to ensure that 100 percent of soil is diverted during grading activities, and that at least 75 percent of nonhazardous construction and demolition waste is diverted from landfill disposal. During all construction phases, wastes would be managed with the use of recycling bins for various debris materials which would be sent to existing recycling and/or processing facilities in accordance with all provisions of the County Construction and Demolition Debris Ordinance. This would include submitting and implementing a Recycling and Reuse Plan to Public Works in connection with obtaining a building or grading permit.	Provide copy of waste management contract for review and approval	Prior to issuance of applicable construction permits	Project Applicant/ Developer	County Department of Public Works	
			Maintain a log book documenting the percent diversion of construction waste	During construction of all development phases	Project Applicant/ Developer	County Department of Public Works	
5.17	**Other Public Services**	**MM 17-10** The Project shall incorporate the Solid Waste Management Plan (Section 3.7 of the Centennial Specific Plan) and the Property Owner/Developer shall be responsible for implementation of the following operational waste reduction requirements to ensure that at least 75 percent of operational waste is diverted from landfill disposal: • The Property Owner/Developer shall process an on-site contract with a waste management company and/or recyclers/composters, and/or self-haul to waste and recycling facilities to properly recycle, divert, compost, and dispose of solid waste generated on-site. Throughout the Project's operation, the waste hauler shall be required by contract to maintain records showing the diversion of not less than 75 percent of the operational waste generated by the Project.	Verification of compliance with Specific Plan requirements	Prior to approval of Tentative Maps	Project Applicant/ Developer and Homeowners Association	County Department of Public Works	**Quantified**

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		• The waste management contract will establish dedicated cans for green waste and a Green Waste Recycling Plan that must be adhered to by landscape maintenance companies as part of the CC&Rs. The CC&Rs will require the use of mulching mowers or mowers with mulching blades for common lawn area, use of California Air Resources Board- (CARB) approved or electric maintenance equipment; placing three to five inches of mulch in common areas' planting beds each year as part of the Landscape Maintenance Plan for all non-residential and multi-family buildings; and diverting organic wastes to a mulching and composting facility or anaerobic digestion facility.	Verification of compliance with Specific Plan requirements	Prior to approval of Tentative Maps	Project Applicant/ Developer and Homeowners Association	County Department of Public Works	
		• The CC&Rs will require the Property Owner to recycle and divert from the waste bin, solids such as metal, glass, paper, plastic, cardboard, food and yard waste; and divert from the waste bin hazardous waste, electronic waste, and universal waste. Information on items prohibited from landfill disposal and on recycling and composting will be provided to Property Owners.	Verification of compliance with Specific Plan requirements	Prior to approval of Tentative Maps	Project Applicant/ Developer and Homeowners Association	County Department of Public Works	
		• Household hazardous wastes and less commonly disposed materials (such as electronics and appliances) shall have seasonal pickup (at least two times a year) and residents would be notified of upcoming events.	Verification of compliance with Specific Plan requirements	Report of seasonal pick up at least two times a year	Project Applicant/ Developer and Homeowners Association	County Department of Public Works	

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		• Semi-annual "exchange days" shall be organized, publicized, and paid for by the Master Homeowners Association (HOA).	Verification of compliance with Specific Plan requirements	Report of exchange days at least two times a year	Project Applicant/ Developer and Homeowners Association	County Department of Public Works	
		• The Project Applicant/Master Developer shall set aside a minimum of 5 acres for a future Materials Recovery Facility/Transfer Station (MRF/TS) that includes a household hazardous waste permanent collection and reuse center and allows for mulching/composting operations. The site shall be located in a suitable location with the capacity to manage the nonhazardous solid waste and household hazardous waste generated by the Centennial Development Project at buildout. The Project Applicant/Master Developer shall prepare and grade the site, and install basic mainline infrastructure fronting the property prior to the issuance of any occupancy permits associated with the first phase of project implementation. The Master Developer shall continually encourage a waste management company to build these facilities on this build ready site. The CC&R for the future MRF/TS site shall require the land to be set aside for the MRF/TS in perpetuity.	Verification of compliance with Specific Plan requirements for an MRF/TS site on the Tentative Map	Prior to approval of Tentative Maps	Project Applicant/ Developer	County Department of Public Works	
			Application for grading permit for the MRF/TS site and CUP and other necessary building permits for the construction of an MRF/TS	Prior to the issuance of any occupancy permits associated with the first phase of project implementation	Project Applicant/ Developer	County Department of Public Works	

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		• The Smart Gardening Learning Center specifications will be provided by County Public Works.	Contact County Public Works for specifications of a Smart Gardening Learning Center	Prior to approval of Tentative Maps	Project Applicant/ Developer and Homeowners Association	County Department of Public Works	
		• Parking for the Learning Center and the MRF/TS may be shared with adjacent uses with the consent of the property owners and County Public Works.	Submit draft Construction Agreement for the Smart Gardening Learning Center and MRF/TS with adjacent uses	Prior to approval of Tentative Maps	Project Applicant/ Developer and Homeowners Association	County Department of Public Works	
5.18	**Water Resources**	**MM 18-1** In addition to complying with the water efficiency and conservation set forth in Divisions 4.3 and 5.3 of the California Green Building Standards (CALGreen) Code or the County Green Building Standards Code, whichever are more stringent, the Project Applicant/Developer shall implement the measures listed below. **Meter Water Use.** Install, maintain, and monitor all non-construction potable and non-potable water use using appropriate metering equipment throughout the site. **Reduce Potable Water Use with On-Site Recycled Water.** Install, maintain, and operate on-site wastewater treatment and conveyance facilities that provide recycled water treated to California Title 22 unrestricted reuse standards from on-site wastewater. Recycled water shall be used to meet (i) 100 percent of commercial, business park, institutional, school, hotel, park, and slope irrigation demand and (ii) outdoor irrigation	Implement water resources measures during design, construction and operation	Prior to issuance of applicable construction permits for Tentative Maps and During construction for each development phase and During future operations	Project Applicant/ Developer	County Department of Public Works	**Quantified**

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		demand in 50 percent of the total very low and low density residential lot landscaped area. **Water Efficient Appliances**. Require installation of water-efficient major appliances (washers, dryers, dishwashers) in compliance with the California Appliance Efficiency Regulations, Energy Star®, or other applicable standards. **Water Efficient Irrigation**. Require the installation of irrigation equipment with a minimum 0.80 irrigation efficiency for all public and private park, recreation and entertainment land use, arterial roadway, and slope irrigation uses. Water Smart/Evapotranspiration-based controllers shall be used. Low water use plants and shrubs shall be used in all irrigated slope areas with an average plant factor of 0.2, as defined in the State Model Water Efficient Landscape Ordinance. **Water Budget Based Water Rates**. Require that the Project Water Purveyor implement water budget based rates in compliance with all applicable legal requirements and in a manner consistent with the use of such rates by other water districts in California (e.g., Irvine Ranch Water District). The water budget based rates shall incorporate and be designed to ensure that Project potable water use meets or exceeds the following standards and adjusted as may be required to meet more stringent standards that may be adopted by the State or Los Angeles County: 1. Indoor Water Use Standards (a) Residential indoor water use – 55 gallons per capita per day (b) Commercial indoor water use – 200 gallons per day per thousand square feet					

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		(c) Business Park indoor water use – 65 gallons per day per thousand square feet, including recycled water for commercial wastewater and cooling use except where prohibited by applicable law for particular types of areas or uses (e.g., employee cafeterias) (d) Institutional indoor water use – 50 gallons per day per thousand square feet (e) Hotel indoor water use – 125 gallons per day per room. 2. Outdoor Water Use Standards (a) Residential outdoor water use – 55 percent of the reference evapotranspiration rate for the Project site (b) Commercial, industrial, and institutional outdoor use – 45 percent of the reference evapotranspiration rate for the Project site <u>3. Water meters shall be required to measure potable water use and may be required to measure recycled water usage at commercial, recreational, and institutional uses; and to monitor single family home lots via sample home survey selection criteria.</u>					

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5.18	**Water Resources**	**MM 18-2** The Project Applicant/Developer shall submit to the County Water Use Reports prepared by a qualified specialist to the satisfaction of the County to verify that projected water use efficiencies are being achieved (1) at the end of the 5th year following first occupancy or occupancy of the 4,000th dwelling unit, whichever occurs later and (2) at the end of the 10th year following first occupancy or occupancy of the 10,000th dwelling unit, whichever occurs later. In the event that a Water Use Report indicates that consumption exceeds projected levels, response measures must be implemented to ensure that available supplies will be sufficient to meet future demand. No further development will be approved until additional measures are implemented to achieve the required efficiencies and/or provide additional water supplies, as confirmed by the Project Water Purveyor. No subsequent Tentative Maps shall be approved until the Project Water Purveyor has demonstrated to the satisfaction of the County that the implementation of specific water demand and supply response measures will ensure that available supplies will meet future Project demand.	Prepare Water Use Reports for review and approval	At the end of the 5th year following first occupancy or occupancy of the 4,000th dwelling unit and At the end of the 10th year following first occupancy or occupancy of the 10,000th dwelling unit, whichever occurs later	Project Applicant/ Developer and Project Water Purveyor	County Department of Public Works	**Support**
5.19	**Wastewater Collection**	**MM 19-1** The Project Applicant/Developer shall provide documentation to the County that it has completed all required procedures and has paid all applicable fees associated with establishing the Project Water Purveyor, or an alternate qualified public utility district, as the operator of the WRFs.	Provide documentation for establishment of the Project Water Purveyor, or an alternate qualified public utility district, as the operator of the WRFs, and verification of	Prior to approval of Tentative Maps	Project Applicant/ Developer	County Department of Public Works	**Support**

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			operating procedures and policies				
5.19	**Wastewater Collection**	**MM 19-2** The Project Applicant/Developer shall demonstrate that the Project has either been annexed into an existing qualified public utility district (e.g. Golden Valley Municipal Water District) or that a new public utility district (e.g. Project Water Purveyor) has been created to serve the Project. The Project Water Purveyor or alternate qualified public utility district shall be responsible for the design, construction, and operation of the wastewater facilities, and shall ensure compliance with all applicable standards and regulations, including all Lahontan RWQCB and Title 22 requirements of the California Code of Regulations. Wastewater treatment facilities, effluent facilities, and sewer lift stations shall be designed with emergency backup power sources and spill containment features, which shall be provided to the satisfaction of the Lahontan RWQCB.	Provide proof of Project annexation or that a new Project Water Purveyor has been created accompanied by a statement that indicates the District/Water Purveyor will be responsible for the design construction, and operation of the wastewater facilities.	Prior to approval of Tentative Maps	Project Applicant/ Developer	County Department of Public Works	**Support**
5.19	**Wastewater Collection**	**MM 19-3** The Project shall incorporate the Wastewater Management Plan (*Centennial Specific Plan*, Section 3.5), and the Project Applicant/Developer shall prepare a Facilities Report, a Pump Station Feasibility Report, and a Sewer Area Study consistent with County Policies and Requirements.	Verification of compliance with Specific Plan requirements for the Wastewater Management Plan on the Tentative Maps	Prior to approval of Tentative Maps	Project Applicant/ Developer	County Department of Public Works	**Support**

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5.19	**Wastewater Collection**	**MM 19-4** The Project Applicant/Developer shall provide the County with plans and specifications that have been prepared in accordance with the Project Water Purveyor or alternate qualified public utility district requirements and standards that demonstrate that the WRF West shall serve the Project site west of the West Branch of the California Aqueduct. The facility shall be located on an approximate 3-acre site and shall treat an average flow of approximately 0.34 million gallon per day. Biosolids shall be hauled to a suitable landfill or used for conversion into fertilizer products.	Design and submit plans and gain approval for the WRF West to serve the Project site west of the West Branch of the California Aqueduct	Prior to approval of Final Map that includes WRF West	Project Applicant/ Developer	County Department of Public Works	**Support**
5.19	**Wastewater Collection**	**MM 19-5** The Project Applicant/Developer shall provide the County with plans and specifications that have been prepared in accordance with the Project Water Purveyor or alternate qualified public utility district requirements and standards that demonstrate that the WRF East shall serve the Project site east of the West Branch of the California Aqueduct. WRF East will be located near the northeasterly corner of the Project and shall treat an average flow of 4.28 million gallons per day. Biosolids shall be hauled to a suitable landfill or used for conversion into fertilizer products. Lined seasonal recycled water storage ponds shall be implemented as required to temporarily store recycled water during times of low demand. The ponds shall implement feasible and applicable wastewater treatment facility best management practices for mosquito and health vector recommended in the California Department of Public Health's 2012 *Best Management Practices for Mosquito Control in California: Recommendations of the California Department of Public Health and the Mosquito and Vector Control Association of California.*	Design and submit plans and gain approval for the WRF East to serve the Project site east of the West Branch of the California Aqueduct	Prior to approval of Final Map that includes WRF East	Project Applicant/ Developer	County Department of Public Works	**Support**

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5.20	**Dry Utilities**	**MM 20.2-1** The Project Applicant/Developer shall coordinate with Southern California Edison (SCE) to ensure that there are no prolonged disruptions to the existing transmission lines that extend through the Project study area and to coordinate in the design and implementation of future electrical service and facilities (e.g., transmission lines, access road) in the Project study area. This will ensure that: (1) no prolonged service disruptions during the extension and upgrading of these services would arise; (2) the nature, design, and timing of electrical system improvements are in accordance with all SCE requirements; and (3) the improvements are adequate to serve the proposed land uses and are available for the first occupied land uses.	Coordinate with SCE in the design and implementation of future electrical service and facilities	Prior to recordation of each Final Map	Project Applicant/ Developer	County Department of Public Works and Southern California Edison	
5.20	**Dry Utilities**	**MM 20.2-2** The Project Applicant/Developer shall provide the County with plans and specifications that demonstrate a future substation shall be constructed in the eastern half of the Project site to serve Project development in the easterly portion of the Project site. To provide adequate capacity for electrical services for the Project, SCE would select one or both of the following two options to implement: (1) reconfigure the Bailey Substation or (2) upgrade the Gorman Substation and retrofit the existing overhead power lines. An electrical infrastructure shall be constructed as part of the main utility corridors for dry utilities. The timing of construction, as well as specific facility location and sizing, shall be coordinated with SCE.	Coordinate with SCE to determine the location of the substation	Prior to recordation of the Final Map that require service from the new substation	Project Applicant/ Developer	County of Department of Public Works and Southern California Edison	
			Construct electrical generation and distribution system improvements	During construction activities	Project Applicant/ Developer	County of Department of Public Works and Southern California Edison	

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5.20	**Dry Utilities**	**MM 20.3-1** The Project Applicant/Developer shall coordinate with the Southern California Gas Company (SoCalGas) in the design and implementation of future natural gas service and facilities in the Project study area to ensure that (1) no prolonged service disruptions during the extension and upgrade of these services would arise; (2) the nature, design, and timing of natural gas system improvements are in accordance with SoCalGas requirements; and (3) the improvements are adequate to serve the Project, to be in place for the first occupied land uses.	Coordinate with SoCalGas in the design and implementation of future natural gas service and facilities	Prior to recordation of each Final Map	Project Applicant/ Developer	County Department of Public Works and Southern California Gas Company	
5.20	**Dry Utilities**	**MM 20.3-2** The Project Applicant/Developer shall install, bond for, or otherwise provide on-site natural gas facilities in coordination with SoCalGas.	Provide on-site natural gas facilities in coordination with SoCalGas	Prior to recordation of each Final Map	Project Applicant/ Developer	County Department of Public Works and Southern California Gas Company	
5.20	**Dry Utilities**	**MM 20.3-3** An additional regulator station shall be constructed by SoCalGas to loop the distribution system for increased reliability. The timing for development of this station shall be determined by SoCalGas through an assessment of the system's operational needs. The timing for construction of this facility, as well as the specific location and sizing, shall be coordinated with SoCalGas.	Construct additional regulator station by SoCalGas	Prior to approval of Final Map with regulator station	Project Applicant/ Developer	County of Los Angeles Department of Public Works and Southern California Gas Company	

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5.21	**Climate Change**	**MM 21-1** The Project Applicant/Developer shall provide the County with plans and specifications that demonstrate 50 percent of the Project's anticipated electrical energy demand at buildout shall be satisfied from on-site renewable energy generation. "Anticipated electrical energy demand" shall be determined on the basis of the anticipated loads for each building as shown in the reports submitted at the time of building permit application pursuant to the Building Energy Efficiency Standards of Title 24. "On-site renewable energy generation" includes, but is not limited to, solar, wind, geothermal, biofuel and hydroelectric systems. These systems shall be installed in connection with the development of one or more of the following: residential units, nonresidential buildings, public buildings, or Specific Plan utility facilities located either within the Specific Plan area or within its immediate vicinity.	Provide plans and specifications that demonstrate 20 percent of energy demand at buildout will be from on-site renewable energy generation	Prior to issuance of applicable construction permits	Project Applicant/ Developer	County Department of Public Works	**Quantified**
			Submit annual progress reports for review and approval	Annually until buildout completion	Project Applicant/ Developer	County Department of Public Works	
5.21	**Climate Change**	**MM 21-2** The Project's plans and specifications shall demonstrate compliance with California Green Building Standards (CALGreen) Code voluntary measure A4.203.1.2.1 Tier 1 for newly-constructed low-rise residential buildings. Therefore, the energy efficiency of these buildings would exceed 2016 Title 24 requirements by 15 percent. Low rise buildings are three stories or less. The Project shall incorporate the Green Development Program (*Centennial Specific Plan*, Appendix 2A), and the Project Applicant/Developer shall be responsible for the implementation of this requirement, which may include energy reduction measures such as use of high performance glazing, radiant heat roof barriers, insulation of all pipes, programmable thermostats, fluorescent and LED bulbs, solar access, sealed ducts, strategic placement of trees	Provide plans and specifications demonstrating compliance with CALGreen voluntary measure A4.203.1.2.1 for low-rise residential buildings	Prior to issuance of applicable construction permits	Project Applicant/ Developer	County Department of Public Works	**Quantified**

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		and other shading devices. All single-family homebuyers shall have the option to include a photovoltaic array system.					
5.21	**Climate Change**	**MM 21-3** The Project's plans and specifications shall demonstrate compliance with CALGreen voluntary measure A5.203.1.2.1 Tier 1 for nonresidential buildings (e.g. hotel, high-rise residential), thereby exceeding the 2016 Title 24 energy efficiency requirements for these buildings by 10 percent. The Project shall incorporate the Green Development Program (Centennial Specific Plan, Appendix 2A), and the Project Applicant/Developer shall be responsible for the implementation of this requirement, which may include energy reduction measures such as high performance glazing, radiant heat roof barriers, high-efficient HVAC with hot-gas reheat, insulation of all pipes, programmable thermostats, fluorescent and LED bulbs, solar access, sealed ducts, zero use of CFC refrigerants in commercial buildings, strategic placement of trees, and other shading devices. Commercial structures shall include passive solar design techniques, such as a north-south panel orientation on buildings, and shall install operable windows designed to maximize natural ventilation by opening into prevailing west winds at inlets and away outlets, thereby reducing use of interior climate controls.	Provide plans and specifications demonstrating compliance with CALGreen voluntary measure A4.203.1.2.1 for non-residential buildings	Prior to issuance of applicable construction permits	Project Applicant/ Developer	County Department of Public Works	**Quantified**
5.21	**Climate Change**	**MM 21-4** The Project Applicant/Developer shall require in contract specifications, that contractors limit construction equipment idling to 3 minutes and include a program to ensure that equipment operators comply with the 3-minute limit.	Limit construction equipment idling through contractor's specifications	Prior to issuance of applicable construction permits for Tentative Maps	Project Applicant/ Developer	County Department of Regional Planning	

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5.21	**Climate Change**	**MM 21-5** The Project Applicant/Developer shall provide plans and specifications to the County demonstrating that <u>all</u> ~~a minimum of 70 percent of~~ public and community pools and spas shall be equipped with active solar heating systems where heating is necessary or desired. The Project Applicant/Developer shall provide the proposed plan for compliance with this provision prior to obtaining a permit for the pool.	Provide plans and specifications demonstrating that <u>100</u>~~70~~ percent of public and community pools and spas would be equipped with active solar heating systems	Prior to approval of pool permit	Project Applicant/ Developer	County Department of Regional Planning	
5.21	**Climate Change**	**MM 21-6** Deeds, CC&Rs or similar legal documents shall contain the following requirement: The owners of all single-family and multi-family residential units shall be required, upon resale, to present to the buyer a written energy audit checklist prepared by a qualified third party at the time the seller provides the buyer with the Real Estate Transfer Disclosure Statement required by California Civil Code, Section 1102 et seq. The energy audit checklist shall certify that all HVAC systems, thermostats, appliances, windows and swimming pools (if applicable) are the same as those originally installed or, if changed, otherwise comply with Centennial's Green Development Program. All residential pool covers shall be removable, and shall not be automatic retractable covers. The CC&Rs of the master homeowners association or other applicable association shall require compliance with the provisions of this measure and shall provide notice to individual owners of the resale energy audit checklist requirement. The master homeowners association or other applicable association shall monitor compliance	Contain requirements in deeds, CC&Rs, or similar legal documents to provide an energy audit at the time of property sale and Provide Annual Report with compliance for review and approval	Upon resale	Project Applicant/ Developer and Homeowner's Association	County Department of Regional Planning	**Support**

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		and provide the County with an annual report of compliance with this measure.					
5.21	**Climate Change**	**MM 21-7** Deeds, CC&Rs, or similar legal documents shall contain the following requirement: For nonresidential buildings, within ninety (90) days after the end of the first full calendar year following the issuance of the certificate of occupancy and within ninety (90) days after each five year period thereafter, the owner or tenant in possession thereof shall submit to the master commercial owners association or other applicable association a report prepared by the owner or a qualified, independent third party that evaluates whether all major building systems such as heat furnace, air conditioner, and other mechanical fixtures are working within the design standards established for each system. The master commercial owners association or other applicable association shall monitor compliance and provide the County with an annual report of compliance with this measure.	Contain requirements in deeds, CC&Rs, or similar legal documents to provide an audit of building systems	Within 90 days after end of first calendar year following issuance of occupancy permit	Project Applicant/ Developer and Homeowner's Association	County Department of Regional Planning	**Support**
			Provide Annual Report with compliance for review and approval	Within 90 days of each five-year period	Project Applicant/ Developer and Homeowner's Association	County Department of Regional Planning	
5.21	**Climate Change**	**MM 21-8** Energy efficient major appliances and HVAC systems that meet the more stringent of applicable California Energy Commission (CEC) requirements or ENERGY STAR requirements, or equivalent, shall be offered by residential builders. Major appliances subject to this requirement include dishwashers, clothes washers, refrigerators, and room air conditioners.	Require in contractors plans and specifications that only Energy Star®-compliant residential appliances are offered	Prior to issuance of construction permits	Project Applicant/ Developer	County Department of Public Works	**Quantified**
5.21	**Climate Change**	**MM 21-9** The Project Applicant/Developer shall provide plans and specifications to the County that have been prepared in accordance with the Project Water Purveyor or alternate qualified public utility district requirements and standards, demonstrating that the Project's wastewater reclamation facilities (WRFs) shall ~~include~~	Provide plans and specifications demonstrating that biogas is captured for	Prior to approval of Final Maps	Project Applicant/ Developer	County Department of Public Works	**Quantified**

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		~~equipment to~~ capture and reuse biogas for energy production.	energy production				
5.21	**Climate Change**	**MM 21-10** The Project Applicant/Developer shall provide plans and specifications to the County demonstrating that nonresidential or multi-family buildings shall be constructed with recycled water infrastructure to serve common areas for these facilities, except where prohibited by law. To the extent recycled water is produced within the Project and available, recycled water shall be used for landscape irrigation within those common areas. Compliance with these measures shall be established prior to the of a construction permits for nonresidential and multi-family facilities and at the time of County approval of final landscaping plans submitted by the Project Applicant/Developer after final map recordation for homeowners association common areas. Covenants, conditions and restrictions (CC&Rs) shall require the owners of such common areas to maintain, repair and replace irrigation systems and plantings in accordance with County approved plans.	Provide plans and specifications demonstrating that recycled water infrastructure is incorporated	Prior to issuance of applicable construction permits and Upon approval of final landscaping plans for common areas	Project Applicant/ Developer and Homeowner's Association	County Department of Regional Planning	**Quantified**
5.21	**Climate Change**	**MM 21-11** The Project Applicant/Developer shall provide plans and specifications to the County demonstrating that nonresidential building shall be constructed with indoor plumbing fixtures and fixture fittings that would reduce the overall use of potable water within the building by 12 percent, consistent with 2016 CALGreen Tier 1 nonresidential voluntary measures as prescribed in Section A5.303.2.3.1 of the code.	Provide plans and specifications demonstrating that appropriate indoor plumbing fixtures and fixture fittings are incorporated	Prior to issuance of applicable construction	Project Applicant/ Developer	County Department of Public Works	**Quantified**

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5.21	**Climate Change**	**MM 21-12** The Project Applicant/Developer shall provide plans and specifications to the County demonstrating that single or multi-family residential buildings shall be constructed with kitchen faucets and appliances that comply with 2016 CALGreen code residential voluntary measures specified in Sections A4.303.1 and A4.303.3 of the code.	Provide plans and specifications demonstrating that kitchen faucets and appliances comply with CALGreen residential voluntary measures	Prior to issuance of applicable construction permits	Project Applicant/ Developer	County Department of Public Works	**Quantified**
5.21	**Climate Change**	**MM 21-13** The outdoor residential (single-family and multi-family) water budget for water budget based ratemaking shall be based on having no more than 25 percent turf grass allowed in landscaped areas of single-family detached residential front yards and multi-family residential common areas.	Install no more than 25 percent turf in landscaped areas of single-family residential front yards and multi-family residential common areas	Prior to issuance of applicable construction permits	Project Applicant/ Developer	County Department of Regional Planning	**Quantified**
5.21	**Climate Change**	**MM 21-14** Ten percent of all homes in Centennial communities that permit housing, with the exception of the lowest density area (Community 8-2) will be affordable, in conformance with the Affordable Housing Implementation Plan (see Appendix 3-H of the Centennial Specific Plan).	Provide affordable housing units in conformance with the Affordable Housing Implementation Plan	Prior to approval of Tentative Maps	Project Applicant/ Developer	County Department of Regional Planning and Community Development Commission	**Quantified**

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5.21	**Climate Change**	**MM 21-15** The Project Applicant/Developer shall provide plans and specifications to the County demonstrating that one 208/240 VAC receptacle that may be used for charging electric vehicles, shall be installed in each detached and attached single-family residence in a manner consistent with 2016 CALGreen Code Voluntary Tier 1 Section A4.106.4.1. The installation shall comply with requirements of the 2016 CALGreen Code Section 4.106.4.1, or the most applicable code at the time of construction. The Project Applicant/Developer shall provide a further credit of $500 to 50 percent of future homeowners (as requested by homeowner) to pay for the type of charging device then in use for electric vehicles or, with County approval, to pay for other energy conservation uses. The availability of this EV incentive benefit shall be disclosed and promoted at the time of initial sale of single family homes and shall thereafter be promoted by the TMA on its website.	Provide plans and specifications demonstrating that 208/240-volt outlets at each single-family residence are incorporated	Prior to finalizing the last building permit inspection and issuing the certificate of occupancy	Project Applicant/ Developer	County Department of Public Works	**Quantified**
5.21	**Climate Change**	**MM 21-16** The Project Applicant/Developer shall provide plans and specifications to the County demonstrating compliance with the Electric Vehicle Supply (EVS) charging station measures specified in MM 11-4. If and to the extent subsequently approved by the County, compliant with state laws, and resulting in no new significant impacts to the environment following County review and approval, EVS charging stations may be replaced by "alternative energy fueling stations" which may include other types of electric vehicle charging technology (e.g., operating at higher or lower voltages), or alternative vehicular fuel technology that results in zero or near zero (as defined by CARB) GHG emission such as hydrogen fuel cells, biofuels, or other qualifying fuel technologies. ~~that "alternative energy fueling stations" shall be installed as follows. An~~	Provide plans and specifications demonstrating that alternative energy vehicle fueling stations are incorporated	Prior to approval of applicable construction permits	Project Applicant/ Developer	County Department of Public Works	**Quantified**

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		~~"alternative energy vehicle fueling station" is a 208/240 VAC electrical vehicle charging station or a station providing another new or improved technology (e.g. compressed natural gas (CNG) and hydrogen fuel cell) that provides refueling for vehicles that do not use fossil fuel.~~ An electric charging station shall allow for simultaneous charging of two electric vehicles. • Business Park and Institutional land use designations shall provide a minimum of one EVS on site for the first 50,000 square feet of usable floor space and additional alternative energy vehicle fueling stations for each additional 50,000 square feet of usable floor space thereafter. • Multi-family residential buildings of at least seventeen (17) residential units shall provide a minimum of one EVS for the first seventeen (17) residential units and an additional EVS for each additional seventeen (17) residential units thereafter. • The Town Center and each Village Center shall provide a minimum of one EVS. • Designated Transit Hubs shall provide a minimum of one EVS.					

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5.21	**Climate Change**	**MM 21-17** The Project Applicant/Developer shall provide plans and specifications to the County demonstrating that the following features have been incorporated into the building designs for non-residential buildings: • Bicycle parking spaces at a rate of 5 percent of minimum required vehicle parking spaces for nonresidential land uses. • Preferential parking for low-emitting, fuel-efficient, and carpool/van vehicles shall be provided as specified in Section A5.106.5.1, Nonresidential Voluntary Measures, of the CALGreen Code.	Provide plans and specifications demonstrating that bicycle parking and preferential parking are incorporated	Prior to finalizing the last building permit inspection and issuing the certificate of occupancy	Project Applicant/ Developer	County Department of Regional Planning	**Support**
5.21	**Climate Change**	**MM 21-18** The Project Applicant/Developer shall provide plans and specifications to the County demonstrating that the following features have been incorporated into the building designs or specifications for multi-family residential buildings: • Visitor parking shall include preferentially located parking spaces for ~~alternative-fueled~~ electric vehicles. • Bicycle parking shall be provided as specified in Section A4.106.9, Residential Voluntary Measures, of the CALGreen Code or as required by County Code Section 22.52.1225B, whichever is more stringent.	Provide plans and specifications demonstrating that parking features are incorporated	Prior to the approval of construction permits	Project Applicant/ Developer	County Department of Regional Planning	**Quantified**

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5.21	**Climate Change**	**MM 21-19** For parking structures and parking lots with 20 or more parking spaces that serve uses other than residential or nonresidential buildings (e.g., trailhead, park), and parking structures and parking lots that serve multifamily residential buildings with 17 or more multifamily units, the Project Applicant/Developer shall provide plans and specifications to the County demonstrating that the following features have been incorporated into the parking facility: • The parking facility shall include a minimum of five percent preferentially located parking spaces for ~~alternative-fueled (~~electric~~, natural gas, or similar low-emitting technology)~~ vehicles. • Five percent of the total number of parking spaces provided in the parking facility, but in no case less than one, shall be Electric Vehicle Parking Spaces (EV Spaces), as defined in CALGreen Code Section 202, capable of supporting future Electric Vehicle Supply Equipment (EVSE), as defined in CALGreen Code Section 202 Calculations for the required number of EV Spaces shall be rounded up to the nearest whole number and the design and installation of each EV space shall be consistent with Section A4.106.8.2, Residential Voluntary Measures, and Section 4.106.4.2, of the CALGreen Code as follows: **Single charging space requirements**. When only a single EV Space is required, install a listed raceway capable of accommodating a dedicated branch circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall be securely fastened at the main service or subpanel and shall	Provide plans and specifications demonstrating that dedicated parking spaces and electric vehicle charging stations have been incorporated	Prior to the approval of construction permits	Project Applicant/ Developer	County Department of Regional Planning	**Quantified**

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		terminate in close proximity to the proposed location of the charging system into a listed cabinet, box or enclosure. **Multiple charging spaces required**. When multiple EV Spaces are required, plans shall include the location(s) and type of EVSE, raceway method(s), wiring schematics and electrical calculations to verify that the electrical system has sufficient capacity to charge simultaneously all the electrical vehicles at all designated EV Spaces at their full rated amperage. Plan design shall be based on Level 2 EVSE at its maximum operating ampacity. Only underground raceways and related underground equipment are required to be installed at the time of construction. • For residential parking facilities, bicycle parking shall be provided as specified in Section A4.106.9, Residential Voluntary Measures, of the CALGreen code or as required by County Code Section 22.52.1225B, whichever is more stringent.					
5.21	**Climate Change**	**MM 21-20** The Project Applicant/Developer shall ensure that the implementation of the Green Development Program ~~takes into account compliance with the~~ that complies with all applicable legal requirements, including but not limited to the following regulations (as may be amended)~~.~~: 1) Regulations that are quantified inputs into the CalEEMod analysis, resulting in GHG Reductions: a) Pavley Motor Vehicle Standards (AB 1493)	Verification of compliance with Specific Plan requirements for the Green Development Program on the Tentative Maps	Prior to approval of Tentative Maps	Project Applicant/ Developer	County Department of Regional Planning	**Quantified**

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		b) Low Carbon Fuel Standard (California Code of Regulations, Title 17, Division 3, Chapter 1, Subchapter 10, Article 4, Subarticle 7, Section 95480 et seq.) c) Title 24 (part 6 [Energy Code] and part 11 [CALGreen Code]) of the California Code of Regulations d) Renewable Portfolio Standard (SB X1 2 and SB 350) e) Solid Waste Diversion (AB 341) f) Statewide reduction in potable urban water usage of 25 percent relative to water use in 2013 (Executive Order B-29-15) g) Model Water Efficient Landscape Ordinance (MWELO) (California Code of Regulations, Title 23, Division 2, Chapter 2.7) h) Los Angeles Tree Planting Ordinance (Los Angeles County Code, Title 22, Division 1, Chapter 22, Part 20, Sections 22.52.2100 et seq.) i) Los Angeles County Green Building Standards Code (Los Angeles County Code, Title 31, Chapter 1, Sections 100 et seq.) j) California Water Code (California Code of Regulations, Division 6, Part 2.10, Sections 10910–10915) k) Los Angeles County Community Climate Action Plan					

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		2) Regulations that are not quantified inputs into the CalEEMod analysis, but should be considered for incorporation as appropriate: a) EPA and NHTSA GHG and CAFE standards for passenger cars, light-duty trucks, and medium-duty passenger vehicles (75 FR 25324–25728 and 77 FR 62624–63200) and for medium- and heavy-duty vehicles (76 FR 57106–57513) b) Cap-and-Trade Program for Electricity, Stationary Sources, and Fuels (California Code of Regulations, Title 17, Division 3, Chapter 1, Subchapter 10, Article 5, Section 95801 et seq.) c) Advanced Clean Cars Program (California Code of Regulations, Title 13, Division 3, Chapter 1, Articles 1, 2, 6 (parts); Chapter 2, Articles 1, 2.1, 2.3, 2.4 (parts); Chapter 4.4 (parts); Chapter 8 (parts). d) Under Inflated Vehicle Tires (California Code of Regulations, Title 17, Division 3, Chapter 1, Subchapter 10, Article 4, Subarticle 8, Section 95550 et seq.) e) Heavy-Duty Vehicle Greenhouse Gas Emission Reduction Regulation (California Code of Regulations, Title 17, Division 3, Chapter 1, Subchapter 10, Article 4, Subarticle 1, Section 95300 et seq.) f) Management of High Global Warming Potential Refrigerants for Stationary Sources (California Code of Regulations, Title 17, Division 3, Chapter 1,					

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		Subchapter 10, Article 4, Subarticle 5.1, Section 95380 et seq.) g) Small Containers of Automotive Refrigerant (California Code of Regulations, Title 17, Division 3, Chapter 1, Subchapter 10, Article 4, Subarticle 5, Section 95360 et seq.) h) High-Global Warming Potential Greenhouse Gases in Consumer Products (California Code of Regulations, Title 17, Division 3, Chapter 1, Subchapter 8.5, Article 2) i) CALGreen Code as Adopted by the Building Standards Commission (California Code of Regulations, Title 24, Part 11 Emergency Building Standard DSA-SS EF-02/15) j) Natural Gas Cooking Stoves and Fireplaces (SCAQMD Rule 445)					

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